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ABSTRACT

Written from the perspective of a relatively large urban school district and dealing primarily with high school-type programs, this handbook is designed for use by local school district practitioners of vocational education evaluation. Part I discusses the history, present status, and goals and objectives of vocational education. Included are developments influenced by federal legislation. Part II presents seven actual case studies which illustrate ten specific evaluation techniques. These techniques are as follow: descriptive survey, interviews, self-evaluation, followup, comparison groups, criterion testing, item analysis, hypothesis testing and sample size, case study, and process evaluation. The techniques described in the case study are presented by three areas of emphasis: area wide, school district wide, and local program. Finally, Part III discusses seven evaluation issues. These are the following: evaluation design and decision-making; preparing a needs assessment; appropriate measuring instruments; abstracting the report for reader utility; incentives for evaluation; politics of evaluation; and finding your own role as an evaluator. (JH)

HANDBOOK IN VOCATIONAL EDUCATION EVALUATION

A CASE STUDY APPROACH UTILIZING BASIC EVALUATION TECHNIQUES IN A VOCATIONAL CONTEXT

By

Parker V. Foster

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The Ohio State University, Columbus, Ohio
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FOREWORD

Need For A Research and Evaluation Handbook

There are events rapidly gaining momentum in education that dictate the need for the basic tools to perform evaluations of vocational programs. These events come generally under the broad heading of innovation or educational reform of various types. These innovations, in turn, are intertwined with a milieu of other forces impinging on the educational systems. These forces include such things as desegregation, collective bargaining, tax reform movements, bilingual education, a need to serve handicapped and disadvantaged students, declining enrollments, declining academic test scores, and a host of other issues. Vocational education must operate its various delivery systems within the context of these several vectors and is thus heavily influenced by them.

Educational innovations are often financed under various federal or state acts and thus quite naturally carry with them a mandate for evaluation. The presumed basis for this evaluation is to measure the effects of programs on students and thus provide a basis for program improvement, policy making, and decision making as to program continuance or elimination; in actual practice however, it appears this allegation may not always be so.

Vocational education has in fact received its impetus from federal legislation for many years, albeit only a small segment of total expenditures nationwide actually come from this source. The most recent federal act (1976) however, as has its two immediate predecessors (1963 and 1968), requires evaluation in a broad sense coordinated from the state level.

This handbook addresses that type of evaluation but it also most specifically orients itself to individual program evaluations at the local level. It is written from the perspective of a relatively large urban school district and primarily deals with high school-type programs, although nearly all of the principles and practices cited are equally applicable to post-secondary programs.

P.V.F.
August 1979

TABLE OF CONTENTS

PART III

HANDBOOK IN VOCATIONAL

EDUCATION EVALUATION

FOR THE PRACTITIONER AT THE LOCAL LEVEL

PARKER V. FOSTER

INTRODUCTION

This is a handbook that is designed to be of direct and practical use to local school district practitioners of vocational education evaluation. Every attempt has been made to present the evaluation designs and instrumentation in a form that is easily understandable and immediately useful. Most individuals charged with such responsibilities, outside of sophisticated university settings, simply do not have the detailed expertise necessary to grapple with the intricacies of complicated evaluation schemes. Indeed, the craft of educational evaluation is itself such a relatively new activity, even the professionals are still debating the outlines of the art.

In any case, such detailed skill is not needed when dealing with the every day on-line delivery of programs basically designed to prepare secondary school students to cope with the world of work that exists outside their school settings. That is not to say vocational education evaluation is any less important than other educational disciplines. It is in fact perhaps one of the most important, and certainly the desired student outcomes are clearly delineated and thus capable of measurement, in most cases.

Vocational education has long needed to define its own philosophy so that it may take its rightful place among other segments of the educational realm that are often more highly regarded by the public. It is suggested that a suitable philosophy for vocational education might be:

> *An academic-educational discipline based on a body of accumulated knowledge and fostering the development of new knowledge which is directed toward decision making, policy making, and skill acquisition as it affects the development of human resources to deal with their employment needs within the economic context of their time. It is accountable for the product of its activities and is willing to express the results to the public with candor and objectivity.*

This manual is an effort to deal with the latter need for accountability as related to individual programs. In addition to being a basic handbook for evaluators, using a case study approach, it also includes a first section briefly dealing with the history, heritage, and legislation pertaining to vocational education and a third section covering a sampling of evaluation issues and practices, including its politics. Thus an additional useful dimension is provided. Despite the brevity of the over all handbook it could be used as an adjunct text book for graduate level courses in vocational education administration and leadership.

PART I

HISTORY, HERITAGE, AND PRESENT STATUS OF VOCATIONAL EDUCATION

Special attention is directed to the federally aided programs of vocational education; not only for the historical basis but also because this is where the actual commissions for evaluation have taken root in recent years. The term "vocational education" is relatively new in the literature of education; having come into prominence near the beginning of this century. Actually the literature in this field probably is on the short side in comparison with other fields of education. It is hoped that it will soon take its rightful place in the annals of academe.

The purpose of this background section is to provide the user of this handbook an ever so brief overview of the earliest beginnings of vocational education so as to set the stage for the ensuing pages which will place us into a position for having a base upon which to illustrate evaluation strategies.

Vocations of individuals in our society have been classified in various ways and it is well known that a person's vocation has an important bearing on his or her status in society. Some vocations tend to provide more prestige than others; are not necessarily related to the accompanying monetary rewards; and often change in popular favor through succeeding generations.

Be that as it may, the concept of systematized employment preparation had to start someplace. This not being an historical treatise per se, it would be inappropriate to devote excessive space to the full gamut of development in the training for work. Suffice to say, it was not until the advent of apprenticeship, which in itself is very old, that we find distinctive patterns of teaching industrial processes. In a historical sense it was "only yesterday" that any systematic attention was given to vocational education as an integral part of formal educational programs.

Apprenticeship began in Greek and Roman days and continued throughout recorded history. In the United States, apprenticeship indenture started in the 1600's and continued until the 1800's, at which time the Industrial Revolution created new demands and requirements for different methods of providing trained labor. This ultimately led to a translation of the industrial needs through various types of training schools. Manual training, and other similar educational endeavors first came into formal organized course structure in the last quarter of the nineteenth century.

Historical Development Influenced by Federal Legislation

Shortly prior to the manual training concept a significant event occurred that has had profound and lasting effect on the course of vocational education and particularly the federally funded influence. This

was the founding of Land-Grant schools.

The federal influence is mentioned frequently, not because it is the largest contributor to vocational education funding, because in fact it is not, but because its presence, through the legislative process has been very deeply felt. Vocational education itself has been the longest, continuously federally aided educational program, of any in this country; dating formally from 1917. However, the one related idea of Land-Grant Schools has existed in a continuum even longer.

The concept of national responsibility for education actually goes even farther back; to the Northwest Ordinance of 1787, but it was not until 1862 that this responsibility was formally initiated in the context of vocational-type training. At this time the Morril Land-Grant Act was passed. This provided the impetus for each state to develop a college where the primary emphasis was to be in agriculture and the mechanic arts (although not to the exclusion of the liberal arts). For the first time, higher education was opened up to the masses of people, and for the first time there was to be the opportunity for individuals to major in topics other than the traditionally acceptable courses in philosophy, theology, literature; and science.

Also this concept was unique in that, for the first time, federal support was to be used for specific rather than for general purposes. Therefore, in the sense that federal encouragement became a vital part of public education; that "non traditional" subjects were to be emphasized; and that the concept has been continued to this day we may safely state that indirectly federal aid to occupational training actually started in 1862 with the passage of the Land-Grant Act.

Contemporary Development Influenced by Federal Legislation

Starting with the Greco/Roman tradition, up through the various forms of apprenticeship in Europe and in this country, the manual training-type schools, and on into the Land-Grant tradition, we find ourselves on the threshold of a continuing legislative influence on vocational education in this country.

Although federal support strictly for vocational education at pre-college level, goes back to the Smith-Hughes Act of 1917, the Vocational Education Act of 1963 is the beginning point for the consideration of all recent federal efforts to expand and improve vocational education. That Act sought to update and upgrade vocational courses by requiring the United States Office of Education to fund national research, experimental, and developmental programs. New funding was also provided to the states for the construction of area vocational schools and for work-study programs.

The Vocational Education Amendments of 1968 further expanded the flexibility afforded the states to offer broad training programs by removing the narrow purpose by purpose state matching of federal expenditures required in previous Acts. Those amendments also sought to encourage the

States to evaluate better the appropriateness of the job training they were offering and to coordinate better their programs with other federal and state job training programs. In addition, those amendments sought further updating and upgrading of vocational programs by providing categorical funding for exemplary projects, cooperative education, curriculum development, and special programs for the disadvantaged. Federal support was also continued for the construction of area vocational schools and for work-study programs.

The states were enjoined to give greater attention to persons with special needs by requiring that at least 15% of each state's basic grant be used for the disadvantaged and at least another 10% be used for the handicapped. The states were also encouraged to fund more programs for persons who had completed or left high school. Lastly, these amendments sought to provide greater federal funding for poorer school districts and to involve greater lay participation in the planning and evaluation of the state's programs by creation of the State Advisory Councils on Vocational Education.

The 1975-76 Congressional hearings on vocational education showed that the Vocational Education Act of 1963 and the 1968 Amendments had clearly achieved tremendous progress. This can be seen in greatly increased enrollments at all levels, especially among postsecondary students and among the disadvantaged and handicapped, greatly increased expenditures of funds for vocational education from local, state and federal sources, the construction of thousands of area vocational schools throughout the country, an increase in the number of trained teachers, and an expansion in the number and variety of course offerings and occupational training areas.

The hearings also focused on the need for improvements in various areas. Many witnesses, including members of State Advisory Councils, stressed the need for better planning and evaluation; greater flexibility on the part of the states; greater attention to the needs of the disadvantaged, the handicapped, and women; and greater coordination of vocational education and other related programs.

In the Vocational Education Amendments of 1976 (PL94-482, Title II), Congress recognized the impact and momentum of vocational education by extending the Act through 1982. It also made a number of revisions in the Act, designed to bring about improvements in some of the areas identified in the hearings. The major revisions are:

(1) Increased emphasis on planning and evaluation: The State must develop a five-year plan, an annual plan and accountability report, and conduct program evaluation. The State Board for Vocational Education must involve the active participation of a number of interested agencies, councils, and groups in the planning process, including the State Advisory Council and the State Manpower Service Council.

(2) Consolidation of categorical programs: With the exception of Consumer and homemaking and programs for persons with special needs, all program funding is consolidated into two blocks,

one for basic grants, and one for program improvement. This allows for greater discretion on the part of the planners in designing programs to meet each state's particular needs.

(3) Set-asides: The minimum set asides for the disadvantaged (increased from 15 to 20 percent), handicapped (10 percent), and postsecondary and adult programs (15 percent), must be specifically matched with an equal amount of state funding. Federal funds for state administration must also be matched with state funds. A new set-aside for guidance and counseling is established, which is a minimum of 20 percent of the program improvement block grant.

(4) Coordination with other programs: Emphasis is placed on coordination with related programs particularly the Comprehensive Employment and Training Act (CETA). Local applications and the state plans must describe the degree to which vocational education, employment training, vocational rehabilitation, special education and other programs assisted under this and related Acts are coordinated.

Clearly, the federal influence has been large. Perhaps no evaluation would have occurred had it not been for this general assistance. Even today, precious little real local program evaluation is undertaken, except for what is actually required through the various state plans. The bona fide evaluation implications are one thing; the moral and general program improvement implications, from the local point of view may be something else entirely, or may be incorporated within the state requirements. In any event there are implications for vocational education evaluation from several points of view; not the least of which is the 1976 legislation.

Evaluation Implications

The permitted uses of federal funds at the local level plus other school financing problems presently facing many states could alter the course of program evaluations. However, the implications of what must be done are reasonably clear. In line with the 1976 legislation the states must prepare five-year plans, annual accountability reports, and conduct program evaluations. Generally it seems that programs are to be reviewed every five years; including follow-up and employer feedback. Different states may interpret this requirement in different ways and may have varying degrees of what functions are performed locally versus what functions are performed at the state level.

Basically three types of evaluation are needed:

Process
Follow-up
Student Impact (Individual Program)

The overall process is best conducted from the state whereby an objective overview of statewide performance levels may be obtained.

Process evaluation of individual programs however, should be an important ongoing activity in any local evaluation efforts.

Follow-up evaluation may be conducted by the state on a sampling basis if it wishes. This approach is acceptable for obtaining a broad perspective of program effectiveness. It does little to help young people directly. It is better for local program improvement and for helping individual youngsters to conduct a well planned follow-up at the LEA or district level, striving for a 75% or more response rate.

Student impact evaluations clearly must be conducted locally. The bulk of this handbook will be directed towards the techniques of local follow-up and local student impact. When possible, the use of process techniques will also be emphasized.

GOALS AND OBJECTIVES OF VOCATIONAL EDUCATION

Simply stated, vocational education has always been considered as education that prepares people to go to work; especially in jobs that are relevant and useful to our society at some given point in time, or potentially useful at a near future point in time. This then, makes the measurement of student outcomes a relatively easy matter. Are they prepared in the skills considered necessary by the occupatio ? Do they have the appropriate attitudes for successful work experience? Do they obtain jobs in classroom-related occupations? Do they continue in these jobs? Finally, do their employers consider them to be "good" employees that have benefited from their school training?

The traditional view of vocational education is that it is a vital force in the "wage competition" theory of labor market operation. That is, it assumes people come into the labor market with a pre-existing set of skills (or lack of skills) and that they then compete against each other on the basis of wages. Education is therefore crucial because it creates the skills which bring people into the market.

An opposing theory is characterized by "job competition" rather than wage competition. Under this theory, the function of education is not to confer skill and hopefully higher wages for the worker; it is rather to certify his "trainability" and to confer on him a certain status by virtue of this certification. Jobs and higher income are then distributed on the basis of this certified status. To the extent that job competition rather than wage competition prevails in the American economy, our long standing beliefs about the economic and social benefits of vocational education may ultimately need to be altered. This is one of the reasons, alluded to in the Introduction, why vocational education needs to have its own body of research literature which records the exploration in the hitherto generally accepted patterns of training.

For the purpose of this manual we shall assume that skill training does provide measurable benefits to the recipient in the job marketplace and that these outcomes are measurable and worthy of the effort to do so.

A General Philosophy

Vocational Education as such probably does not presently have a clearly defined philosophy. It does have a set of basic principles that remained virtually unchanged for 60 years or so. A suggested general philosophy was put forth in the Introduction section. What is needed here is a philosophy for evaluation. What are the reasons for evaluation? Because the state or federal funding sources require it as a condition of granting and continuance process and product effects of programs? Perhaps even as a basis for decision making at various educational levels?

A suitable base for a philosophy is that *evaluation and instructional program are one and the same. Evaluation is as much a part of the program*

as is curriculum development and classroom instruction. In no other way can the effects of programs be documented and assistance be provided for improvement or curtailment. Evaluation should be "low key" and should interfere as little as possible with the actual instruction process although it is a vital part of it. The personality of the evaluator is paramount. By gaining the confidence of program staff and participants and by removing the "threat" of evaluation he can become a significant contributor to educational outcomes. Decision makers at both state and local levels should pay attention to evaluation results; the truth is that they very often do not do so. As a general rule, evaluation as a profession, has a ways to go before results are taken seriously.

Does Vocational Education Help Close the Gap Towards Economic Equality?

This question arises again and again if one squarely faces the issues. Vocational educators are often inclined to accept as gospel, the concept that acquisition of a set of skills gives one student an edge in the employment market over another student who has not had such training. Some recent, well publicized research, has shown that the output of the schools (including vocational education) is not related to what goes on in the school, or is not related to equalizing opportunity to succeed or fail, but is based largely on a single inpute, namely the characteristics of the entering children. This theory proposes that schools have absolutely no control over the two factors that weigh most heavily on success: heredity and home environment.

Assuming that vocational education purports to provide an edge, at least in the obtaining of initial employment, then in view of the theory that schools may not be change agents for equal opportunity it is fair of us to ask:

> *"Are graduates of high school vocational programs who go straight to jobs (or related community college training and then to jobs) better off in the quality of jobs, earnings, unemployment rates, or job satisfaction than comparable non vocational graduates who go to work immediately? Is the nature of the curriculum a causal or decisive factor in any difference between these groups?"*

This question raises a host of research problems that will provide material for countless doctoral dissertations in the future. To date the most common research finding has been that vocational graduates obtain their first jobs more quickly and, subsequently, experience fewer and briefer spells of unemployment than others with a high school education. But the evidence is by no means conclusive.

Again, for purposes of this handbook, we shall assume vocational education can be a contributor to educational and societal equality - despite nagging doubts about what research has actually told us so far. This leads us directly to the goals created by the 1976 legislation.

Goals Established by 1976 Legislation for Evaluation

The goals of vocational education - especially the evaluation thereof, as spelled out in PL 94-482, center around states' responsibility to:

- o prepare a five year plan
- o prepare an accountability report, based on the five year plan
- o conduct evaluation of all programs funded under the Act, within the period of the five year plan
- o measure student job success by rates of employment, wage rates, duration of employment, and employer satisfaction with performance of vocational education students as compared with those who have not had vocational education.
- o evaluate the states' entire delivery system each five year period by the use of valid sampling techniques.

The goals appear clear cut. Evaluation of the federally assisted program, by the state is required and should be a district responsibility also. After all, how may these data be collected without the complete cooperation and assistance of local district? In subsequent sections we shall deal primarily with the local function and related techniques. The purpose of this section is to lay out in definitive terms the goals and legislative mandates to evaluate vocational programs. The moral and program improvement imperative for the local deliverer of services probably supersedes the legal requirements in terms of helping students and ultimately contributing to the literature in vocational education.

Interpretation of Legislative Goals at the Local Level

The goals as spelled out in federal legislation may be interpreted at the local level in one of two basic ways, to wit: 1) What is required and, 2) What is desirable for program improvement.

What is Required

What is actually required locally, revolves around development of a plan indicating the nature of the federally aided program(s), plus an accountability report, and a follow-up of program completers. The new legislation also broadens the follow-up to include employers of program completers and leavers. Traditionally in the past LEA's have been required to:

- o prepare a plan.
- o prepare an enrollment report showing numbers of students in programs, broken down by sex, disadvantagement, and handicapping condition.
- o prepare a follow-up report approximately six months after students complete programs and leave school (i.e. follow-up report in December/January for the previous June's completers-leavers).

The new additions include the accountability report and follow-up of employers. Techniques of follow-up are treated in this handbook, as are other approaches under the general rubric of accountability.

What is Desirable for Program Improvement

What is desirable, of course, is for the local district to conduct an ongoing process and product evaluation of its vocational programs. This could be done in concert with the federal mandate to evaluate each program (statewide) every five years. The states will no doubt attempt to assume major responsibility for conducting these evaluations. This does not preclude individual districts from doing their own evaluations, and most importantly, using the results of these evaluations for decision making purposes.

The author was fortunate enough to be employed by a school district that assumed this responsibility. While decision making may not always have been based on evaluation results (because of inhibiting local conditions such as long-term entrenchment of programs, teacher tenure, etc.) every major program in the district was evaluated during a five year period. The material in this handbook is based largely on ideas developed in this and other districts in the same state. A series of case studies are described to illustrate the use of ten basic evaluation techniques for local vocational programs. These techniques are illustrative of some standard evaluation strategies, merely applied in a vocational setting.

Study Questions - Part 1

a) Prepare a two page paper describing your perception of the four major turning points in vocational education legislation.

b) Contact your State Department of Education and ask for materials relating to their evaluation procedures. Write a two page synopsis.

c) Develop a chart that compares and contrasts statements regarding evaluation in Smith-Hughes, VEA 63, VEA 68, and VEA 1976.

d) Develop a timeline of federal legislative enactments. Analyze the various groupings that occur.

PART II

EVALUATION CASE STUDIES

The evaluation illustrations are directed to three major foci, ten specific techniques, and seven actual case studies to show the use of the techniques. This is clearly a very limiting factor - there are far more than ten techniques that are generally used in educational evaluation. Our position, is that these basic functions - if mastered properly - are normally sufficient to provide the local evaluator with the basic tools he needs to provide reliable and useful evaluation information for vocational education as presently structured in our schools. Some of this information may be utilized to complete the required state forms; but hopefully such data will frequently be used in process and program decision making. The basic techniques to be discussed are:

1. Descriptive survey
2. Interviews: student, staff, and employer
3. Self evaluation
4. Follow-up
5. Comparison groups
6. Criterion testing
7. Item analysis
8. Hypothesis testing and sample size
9. Case study
10. Process evaluation

These processes are described in a series of case studies which are listed by three areas of emphasis.

- o Area Wide - Case Study 1
- o School District Wide - Case Studies 2 & 3
- o Local Program - Case Studies 4 - 7

CASE STUDY NO. 1: PROJECT FOCUS

One obstacle to preventing efficient development and coordination of quality vocational education programs in various states, especially urban areas within states, has been a lack of knowledge as to what constitutes an actual delivery system. At the time of the PROJECT FOCUS study the policy makers in at least one state appeared to be making their decisions in a partial vacuum. Communication between many of the deliverers was lacking; in fact no one really knew who, in fact, constituted the complete family of vocational education training agencies in any given urban area. Even the concept of defining what is the urban area or metroplex presented a problem.

Members of the state legislature, and many other citizens were concerned about the complexity of systems offering vocational education programs in the state. There was (and still is) some reason to believe there was a duplication of efforts and services among the various educational, community service, and manpower agencies, both public and private. There was clearly a need for planning to ensure a maximum of cooperation and a minimum of overlap of services provided. The net result could be an effective state-level policy which would be based on underlying beliefs or assumptions.

One of the principles of vocational education calls for a coordination among various agencies and institutions to optimize the use of available resources. Since agencies, both public and private, often serve a different clientele, have different goals, and may not have a desire to cooperate, the task of coordination becomes difficult. In any event, until such time as a reasonably valid picture of what exists is described, it is clearly difficult to attempt total coordination.

In an effort to establish some baseline descriptive data the State Advisory Council on Vocational Education, through a consulting arrangement with the Harrison Unified School District, commissioned a descriptive study of all deliverers of vocational training in the general Harrison District service area.

Harrison itself has a population of more than 800,000 people and is considered to have one of the best managed school systems in the nation. It is overshadowed by at least one other larger metropolitan area in its state although its growth has been steadily upward since the second world war. It has a large accumulation of military facilities, but the industrial base has broadened far beyond this primary "industry" during the last 30 years.

The county in which the city of Harrison is located has about 1.2 million people, but approximately 80% of those live within Harrison and the immediately surrounding clusters of bedroom communities commonly found in the west. It was therefore decided to include as the study area an urban complex that extended beyond the limits of Harrison and the Harrison school district to embrace a population of about 1,000,000 persons, of whom

the majority of heads-of-family, work within the boundaries of the study area. The boundary lines were drawn so as to coincide with the inclusion of three complete community college districts.

The basic techniques of the study were to:

- Define the geographical area.
- Identify the deliverers of training services; public and private.
- Develop a questionnaire to supply the desired data.
- Conduct structured interviews with agencies using the questionnaire as a base.
- Prepare a final descriptive report.

Technique 1: The Descriptive Survey

A descriptive survey is intended to describe a specific set of phenomena in and of themselves. The rationale for the purely descriptive survey is the fact that the information provided is in itself the answer to the research question posed. The most familiar example of the descriptive survey is the United States Census, which seeks information designed to answer a wide variety of research questions beginning with "how many people...". Many descriptive surveys have this census type head-counting aspect beginning with "how many," "what," or "where." For example, a descriptive survey would be appropriate to seek answers to questions like the following. "How many classroom seats are there for retarded children in the Northeastern states?" "How many teachers currently teaching grades 4 through 8 have less than a baccalaureate education?" "What is the median salary for full professors in fully accredited colleges?" "Where are the colleges and universities that offer advanced preparation in educational research?"

Thus, in educational research or evaluation, there are two conditions which occurring together suggest and justify the descriptive survey; first, that there is an absence of information about a problem of educational significance, and second, that the situations which could generate that information do exist and are accessible to the researcher.

In the case of the FOCUS study the descriptive survey ended with the description itself. In another case study we shall demonstrate how the descriptive study, when applied to a single school or vocational program can have a definite impact on the process evaluation of a project to help keep it on the course that was originally intended.

Advantages of a Descriptive Survey:

a. Information provided is in itself the answer to the question posed.
b. Documents a particular situation, by person(s) actually witnessing it, and thus becomes valuable information for possible later historical research.

c. Provides data for process evaluation to improve programs as they currently operate.

Disadvantages of a Descriptive Survey:

a. The material presented may be very subjective and subject to bias.
b. Analysis of data is usually not planned until after it is collected (This may not always be a disadvantage).
c. Sample described is often selected on the basis of convenience rather than randomly.

Technique 2: The Interview

The interview can be done in a number of ways, but perhaps its best use is in a structured manner; that is in conjunction with a previously prepared questionnaire. In the case of FOCUS, the questionnaire was prepared, then the potential respondent was contacted for an interview appointment. About a week before the appointment a copy of the questionnaire was mailed to him with a cover letter reminding him of the upcoming meeting to discuss it. The ideal situation (infrequently attained) was that the agency would have the questionnaire completed prior to the arrival of the interviewers. Two interviewers were used so as to reduce the possibility of subjectivity in interpreting answers. Ideally the interview itself would consist merely of clarification of points that may not have been completely understood in the questionnaire. More often than not the interviewee was not prepared ahead of time and the interview consisted of a detailed discussion of each applicable item, thus unproductively utilizing the time of all parties. A copy of the questionnaire which was used follows.

Framing questions for the interview:

a. Ascertain whether the population from which the respondents have been selected actually has the information sought by the interview and that the questions permit the reasonable recovery of this information.

b. Questions must be framed in language that ensures effective communication between the interviewer and the respondent. Omit all ambiguous vocabulary.

c. Make certain respondent appreciates the purpose of each question he is asked. Avoid arousing any suspicion or resistance.

d. Avoid leading questions (questions which suggest a desirable or preferred answer).

e. Ensure that the frame of reference surrounding each question is clear so that each respondent hears the question in the same way, avoiding misinterpretations. (The two interviewers can help here).

f. Pretest the interview in a pilot study to eliminate weakness and experiment with alternative items or techniques.

Advantages (over a questionnaire)

a. Permits greater depth.
b. Permits probing to obtain more reliable data.
c. Makes it possible to establish and maintain rapport with respondent or at least determine when rapport has not been established.
d. Provides a means of checking and assuring the effectiveness of communication between the respondent and the interviewer.
e. Ensures a larger response rate.

Disadvantages of an interview:

a. Interviews are costly, time-consuming, and inconvenient.
b. If the researcher takes advantage of the interview's adaptability, he introduces the problem of subjectivity and personal bias.
c. Eagerness of the respondent to please the interviewer, a vague antagonism that sometimes arises between the interviewer and the respondent, and the tendency of the interviewer to seek out answers that support his preconceived notions all complicate this method.
d. The thorough training required of the interviewer to offset these disadvantages becomes an additional burden, increasing the cost and time factors.

NAME OF AGENCY

DATA GATHERING FORM

A GUIDE FOR THE STUDY OF HARRISON "METROPLEX" AGENCIES RESPONSIBLE FOR DELIVERING VOCATIONAL EDUCATION

Administered under the auspices of
The Advisory Council on Vocational Education
and Technical Training

1975-76
(CACVE PILOT FOCUS PROJECT)

This instrument should be completed only by a person or persons familiar with the overall functions of the agency.

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EXPLANATION

Many people in this state are becoming increasingly concerned with the complexity of systems delivering vocational education services. There is some reason to believe a duplication of effort exists among and between the various educational agencies. To ascertain if this situation really exists, the Advisory Council on Vocational Education and Technical Training (CACVE) has made the decision to take some definitive action.

In order to develop a framework for analysis of the vocational education delivery system, CACVE has commissioned a study of an urban metroplex and the agencies that exist within it. In addition to the usual public education systems, the study includes private schools and agencies under the purview of state and federal offices.

Harrison was chosen for this effort and the area of study includes:

The Harrison city limits plus the immediate adjacent high school and community college districts.

THANK YOU

(See last page for name and address of primary investigator.)

DEFINITIONS

The following words are used in the questionnaire and are defined as follows:

1. Administration: An educational function which includes persons and/or dollars devoted principally to the direction and management of an agency, including also the necessary support services; as opposed to the same type of resources allocated to instruction, guidance, etc.

2. Adult: A student 18 years of age or over, who is not in a regular high school; excluding agencies such as RETC.

3. Apprenticeship: An approved training program for a recognized trade.

4. Entry-level: Skills needed for a beginning job in the occupation being described.

5. Guidance: An educational function which includes persons and/or dollars allocated principally to assisting students in making informed choices relative to career and job selection, preparation, placement, and advancement.

    1) Counseling: A sub-function of guidance; usually defined as a close one-to-one relationship with students.

    2) Placement: A sub-function of guidance; relating to counseling and/or other activities to help students become employed in situations which fit their needs.

6. Handicapped: Persons with physical, mental, or emotional impairments.

7. How many prepared for labor market: Number of students who exit the program with job-related skills.

8. Out-of-School Youth: High School age youth who are not enrolled in a formal school program.

9. Post Secondary: Educational services offered beyond secondary education or the age of compulsory school attendance.

10. Retrain: Training for people who obtained their original job skills in the past and who have been out of the labor market.

11. Specialization: Training above the entry-level in programs designated as technical or semi-professional.

12. Students Served: Total number of students enrolled in a program during the past one-year period; includes those who have received instruction and/or guidance, and placement services.

13. Subunit: Any location where occupational training and/or related functions take place, e.g. School, outreach center, store front operation, community center--medical, financial, or retail trade outlet, industrial site, etc.

14. Unduplicated Count: Number of individual students served; regardless of how many separate programs they may have been involved with.

15. Upgrade: Further training to upgrade current skills to meet changing job or market demands.

SURVEY QUESTIONS

DESCRIPTION OF DELIVERY AGENCY - QUESTIONS 1-7

1. Approximate number of subunits in your agency that are located within the study area (e.g. three community college campuses; number of CETA training sites, etc.).

_____

2. Please list, by name, all your subunits and then check, in the appropriate boxes, the nature of the services provided in each.

SUBUNIT NAME	FUNCTION OR TYPE OF SERVICE PERFORMED IN SUBUNIT										
	Administration & Supervision	Classroom Instruction	On-The-Job Training	Guidance	Placement	Financial Aid	Job Development	Social Services	Other (Specify)	Other (Specify)	Other

3. What geographical area does your agency serve? (e.g. County of San Juan; a specific school district boundary; a city limit, etc.) For your convenience we have included a map of Southwestern County on the following page. Please indicate your regular service area using a colored marker. If you routinely draw students from outside this area, please indicate those boundaries with a different color and identify the difference in the space below.

4. To what agency office do you report your enrollment, financial, and other statistical data? (e.g. State Department of Education Regional Office.) (Please attach a copy of blank report form(s).)

5. What do you ascertain to be the major educational function(s) and/or "missions" of your agency? (Check all applicable items.)

Job entry level training	_____	Other (describe below)
Upgrading job skills	_____	
Job retraining	_____	_____
Apprenticeship training	_____	_____
Adult vocational training	_____	_____
Job specialization training	_____	_____
Rehabilitational services	_____	_____
Services to out-of-school youth	_____	_____
Inplant training	_____	_____
Military job training	_____	_____
Vocational and career guidance	_____	_____
Counseling	_____	_____
Job development	_____	_____
Job placement	_____	_____

6. Do you contract with other agencies for facilities or services? Yes ___ No ___
If Yes, please describe the arrangements; including numbers of students using leased facilities _____.

7. Do you lease facilities to others, or supply services? Yes ___ No ___
If Yes, please describe these arrangements, including number of students involved _____.

DESCRIPTION OF STUDENTS SERVED - QUESTIONS 8 AND 9

8. How students are served by your agency. Check all applicable items in the first column; enter numbers of students served in columns 2 through 9; and check type of service in columns 10 through 20. (Please note definition of "Students Served").

TYPE OF CLIENT SERVED BY YOUR AGENCY	NUMBER OF STUDENTS (UNDUPLICATED)								CHECK APPROPRIATE APPLICABLE SERVICE										
	Under 18	18-40	40-61	65+ Over	Male		Female		Instruction					Guidance	Placement	Financial Aid	Social Services	On-The-Job Training	Other
					M	NM	M	NM	Entry Level	Partial Learned	Refresher	Certain Knowledge	Upgrade Skills						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
High School																			
Post Secondary																			
Adult Educ.																			
CETA																			
Apprentice																			
Correctional																			
Rehabilitation																			
Military																			
Welfare																			
Out-of-School Youth																			
Handicapped																			
Employee (Inplant)																			
Other (Please Describe) _____																			
TOTALS				1*				2*											3

*Totals in blocks 1 and 2 should be equal.

LEGEND. M = Minority
NM = Non-minority

9. Please give us your best estimate of an unduplicated count to include all students reported in Question 8. (Please explain if it does not equal Block 1 Total in Question 8) _____

DESCRIPTION OF FUNDING AGENCY CONTACT RELATIONSHIPS - QUESTIONS 10-15

10. In the table below, please estimate as accurately as possible, using your own accounting system, the sources of your financial support and categorize by "purposes" for which used: (if you are unable to give a reasonably accurate breakdown in dollars - as between purposes - then please designate as a "percent of total expenditures.")

SOURCES	PURPOSES FOR WHICH USED							
	1 Administration	2 Instruction	3 Support Services	4 Allowances 1*	5 Guidance	6 Placement	7 Capital Outlay	8 Other
VEA-A								
VEA-B								
VEA-C								
VEA-D								
VEA-F								
VEA-G								
VEA-H								
CETA Title I								
Title I 3%								
Title II								
Other								
Criminal Justice								
Other Federal								
State ADA (specify)								
Local								
Private Tuitions								
Grants								
Other Private								

*1 - Stipends paid to trainees.

11. Which of the following items will your present accounting system allow you to calculate? (Please check.)

_____ Cost per student trained
_____ Cost per ADA
_____ Cost per instructor hour
_____ Cost per placement
_____ Cost for placement services
_____ Cost for guidance services
_____ Cost of administrative services
_____ Cost of ancillary services
_____ Cost for student recruitment
_____ Other (specify) _____
_____
_____

12. In what manner is follow-up data on former students recorded? (Please check.)

_____ Number of completions
_____ Number of completed and working
_____ Number left early for employment
_____ Number working in area of training
_____ Number working in related job
_____ Number continuing education and training
_____ Placement data by program
_____ Other (specify) _____
_____
_____

13. In what way, if any, is your agency administratively and/or fiscally responsible to any other state or federal agency? (Check agency and describe relationship.)

_____ Post Secondary Education Commission
_____ Department of Education
_____ Chancellor's Office (Community Colleges)
_____ Criminal Justice Department
_____ Employment Development Department
_____ Department of Labor
_____ Other (please name) _____
_____ None

Briefly describe below what this relationship is and what "umbrella" or supervisory functions this agency performs related to your own unit(s).

14. What agencies or entities do your professional staff maintain regular communication with? (Direct communication on a regular basis). These might include "Health Manpower Committee" or "The Industry/Education Council," etc. Please list.

NAME OF AGENCY OR ENTITY		
State	Federal	Private

15. Please place items from Question 14 above in rank order of contacts according to the "influence" exerted on your operation. Also provide the type of information exchanged.

NAME	WHY RANKED IN THIS ORDER	TYPE OF INFORMATION EXCHANGED

DESCRIPTION OF TRAINING PROGRAMS OFFERED - QUESTIONS 16-17

16. In the table below, please check in columns 2, 3, 4, 5, 6, and 7, if you offer programs under the broad job clusters as shown. Please check the name of the program (not individual courses). Your particular program may not have the exact title as shown. Try to fit it as closely as possible or, if necessary, write in one of the blank spaces. Please enter in columns 8, 9, and 10 the number of students you expect to be served this year, and in column 11 the number of students prepared for the labor market.

CLUSTER/PROGRAM	LEVEL OF INSTRUCTION						NUMBER OF STUDENTS SERVED			NO. PREPARED FOR LABOR MKT.
	Entry	Specialization	Upgrading	Retraining	Apprenticeship	Inplant	Instruction	Guidance	Placement	
1	2	3	4	5	6	7	8	9	10	11
1. AGRICULTURE & AGRIBUSINESS										
Agricultural Business										
Agricultural Resources										
Agricultural Mechanics										
Agricultural Science										
Animal Health Technoloby										
Forest Technology										
Horticulture Technology										
Ornamental Horticulture										
Production Agriculture										
_____										
_____										
_____										
2. BUSINESS AND OFFICE										
Accounting										
Bookkeeping										
Business Machines										
Business Management										
Clerk Typist										
Computer Programming										
Court & Conf. Reporting										
Data Processing										
Legal Assistance										
Secretarial Science										
_____										
_____										
_____										

1) Figures placed in columns 8 and 11 may or may not be equal due to exploratory Programs, dropouts, hire-outs, required classes, etc.

16. (Cont.)

CLUSTER/PROGRAM	LEVEL OF INSTRUCTION						NUMBER OF STUDENTS SERVED			NO. PREPARED FOR LABOR MKT.
	Entry	Special-ization	Upgrading	Retraining	Appren-ticeship	Implant	Instruction	Guidance	Place-ment	
1	2	3	4	5	6	7	8	9	10	11
3. COMMUNICATIONS AND MEDIA										
Audiovisual Technology										
Commercial Art										
Graphic Design										
Journalism										
Letterpress Printing										
Lithography (Photo Offset)										
Photography										
Printing and Publishing--Administration										
Printing and Publishihg--Operations										
Product Design										
Publications Technology										
Radio Broadcasting										
Technical Illustration										
Tech. Materials Publication										
Telecasting										
4. CONSTRUCTION										
Architectural Drafting										
Bricklaying and Masonry										
Building Construction Tech.										
Building Trades										
Carpentry										
Civil Technology										
Electrical Technology										
Heavy Equipment Operations										
Plumbing and Pipefitting										
Sheet Metal										
Trade Electricity										
5. ENVIRONMENT & NATURAL RESOURCES										
Electric Power and Distribution										
Evironmental Health Tech.										
Forest Products Technology										
Geologic Technology										
Marine Technology										
Natural Resources Management										
Soil Conservation										
Water Quality Control Tech.										

16. (Cont.)

CLUSTER/PROGRAM	LEVEL OF INSTRUCTION						NUMBER OF STUDENTS SERVED			NO. PLACED FOR LAST YR.
	2 Entry	3 Special-ization	4 Upgrading	5 Retraining	6 Appren-ticeship	7 Inplant	8 Instruction	9 Guidance	10 Place-ment	11
6. HEALTH										
Dental Assistance										
Dental Hygiene										
Dental Lab Technology										
Health Care Management										
Inhalation Therapy										
Medical Assistance										
Medical Record Technology										
Medical Laboratory Tech.										
Mental Health Technology										
Nursing Assistance										
Operating Room Technology										
Optical Technology										
Physical Therapy Assistance										
Practical Nursing										
Radiologic Technology										
Registered Nursing										
_____										
_____										
_____										
7. HOME ECONOMICS										
Child Care Assistance										
Commercial Baking										
Consumer Home Economics										
Culinary Arts										
Custom Apparel Design & Tailoring										
Dietetic Technology										
Drycleaning										
Food Services--Cooking										
Food Service Management										
Food Service Preparation										
Interior Design										
_____										
_____										
_____										
8. MANUFACTURING										
Air Conditioning and Refrig-eration Technology										
Cabinetmaking										
Chemical Technology										
Electromechanical Technology										
Electronics Technology										
Furniture Upholstery										
Industrial Supervisions										
Instrumentation and Process-Control Technology										
Machine Tool Operating										

16. (Cont.)

CLUSTER/PROGRAM	LEVEL OF INSTRUCTION						NUMBER OF STUDENTS SERVED			NO. PREPARED FOR LABOR MKT.
	Entry	Specialization	Upgrading	Retraining	Apprenticeship	Inplant	Instruction	Guidance	Placement	
1	2	3	4	5	6	7	8	9	10	11
8. (Cont.) Machine Tool Technology Mechanical Design Technology Mechanical Drafting Mechanical Production Techn. Metallurgical Technology Numerical-Control Machine Technology Quality Control Welding										
9. MARKETING AND DISTRIBUTION Fashion Merchandising Finance Food Distribution Hotel and Motel Assistance Hotel/Motel/Restaurant Management Industrial Marketing Insurance Marketing Merchandising Purchasing Real Estate Traffic Management										
10. MECHANICAL TRADES & SERVICES Air-Conditioning & Refrigeration Servicing Fluid Power Maintenance Home Appliance Servicing Shoe, Boot, & Saddle Repair Small-Engine Repair Stationary Engineering Watch Repair										
11. PERSONAL SERVICES Barber Training Beauty Culture Mortuary Science & Funeral Service										

16. (CONT.)

CLUSTER/PROGRAM	LEVEL OF INSTRUCTION						NUMBER OF STUDENTS SERVED			NO. PREPARED FOR LAST YEAR
	2 Entry	3 Specialization	4 Upgrading	5 Retraining	6 Apprenticeship	7 Inplant	8 Instruction	9 Guidance	10 Placement	11
12. PUBLIC Services										
Corrections										
Crime Laboratory Technology										
Fire Protection Technology										
Law Enforcement (Police Sc.)										
Library Technical Assistance										
Social Work Assistance										
Teacher Assistance--Special Education										
Urban Planning Assistance										
_____										
_____										
_____										
13. RECREATION										
Commercial Music										
Recreation Leadership										
Theatre Arts										
_____										
_____										
_____										
14. TRANSPORTATION										
Aerospace Technology										
Aircraft Assembly										
Airplane Mechanics										
Air Traffic Control										
Automobile Body Repair										
Automobile Mechanics										
Automotive Technology										
Aviation Management										
Diesel Mechanics										
Pilot Training										
Transportation Engineering Technology										
Truck Driving										
_____										
_____										
_____										
15. APPRENTICESHIP										
_____										
_____										
_____										
_____										
_____										
_____										

17. Please describe the following items in your own words.

a. Where you feel there may be duplication or overlapping of activities and/or services in the geographic area of this study.

b. Are there any particular constraints or inhibitors that restrict vocational services to students, e.g. financial, laws, reporting, communicating, etc.

c. How do you feel reporting requirements (e.g. as VE-48 et al) can be improved to better describe your programs and services, or for evaluation purposes?

d. What criteria have you identified to measure program success? (If available, please attach copy of a typical evaluation report and/or your criteria.)

e. Please describe what methods or mechanisms are utilized to accomplish student placement into employment.

THANK YOU FOR YOUR HELP

Dr. P.V. Foster
Harrison City Schools
4100 Exeter Street
Harrison CA

CASE STUDY NO. 2: SITE VISITS

Since states are required to collect evaluation information from local districts they have chosen to accomplish this task in a number of different ways; few of which as yet deal directly with individual program student outcome information. The one partial exception to this is the annual follow-up report of program completers and leavers. That method is discussed in Case Study number 3.

During past years in a western state, under the stipulations of the Vocational Education Acts of 1968 and 1976 action was in a series of site visitation to 20 school districts or regional occupational programs per year. The districts surveyed, selected on a random basis, varied from small units with one high school up to and including the second largest district in the state with 15 high schools. The self-evaluation technique is employed in this activity, and the entire procedure itself must be considered as a process-type evaluation system.

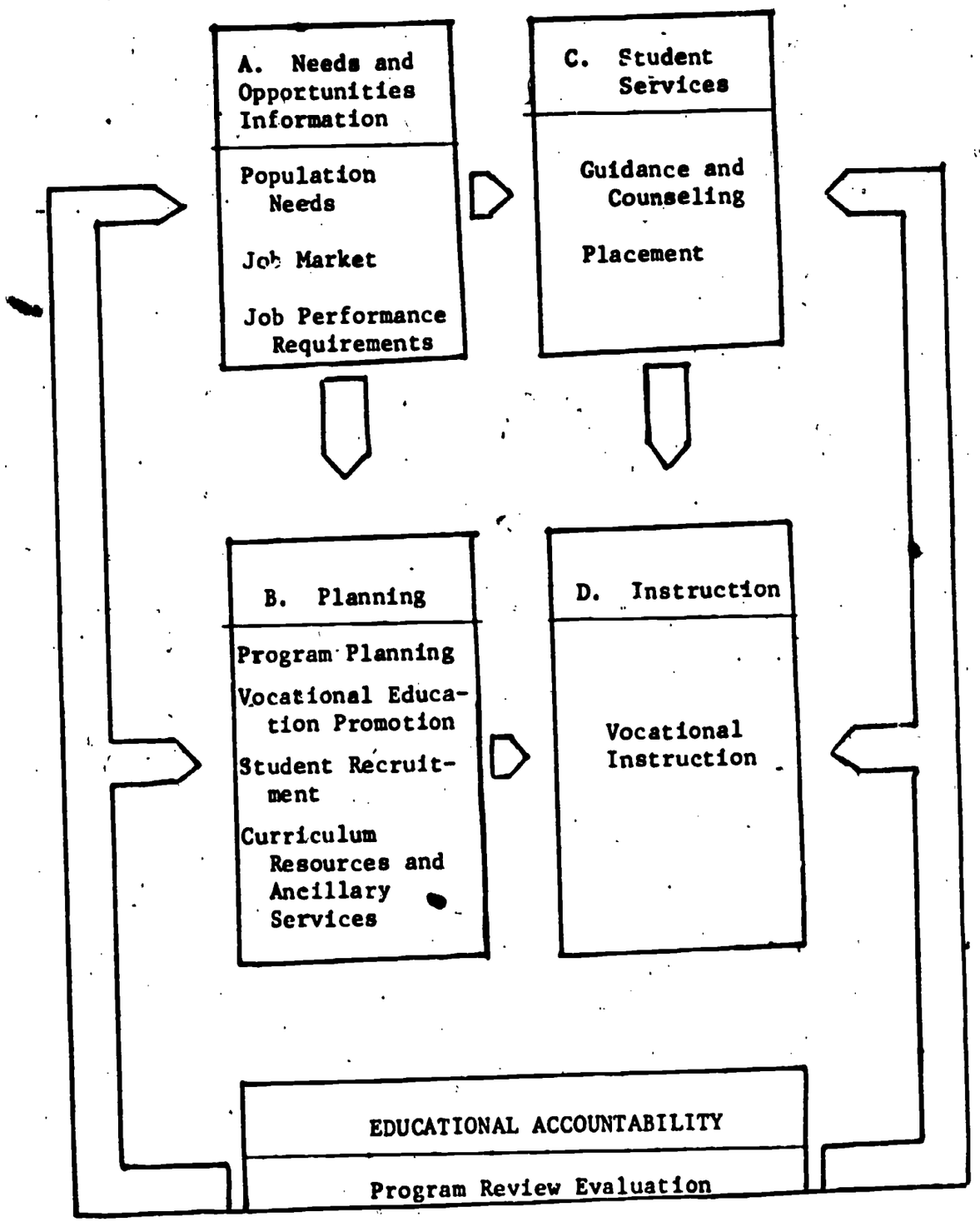
The final product ends up as a descriptive summary of district vocational programs based on a functional approach. On forms supplied by the state, the district describes within certain guidelines, the existing condition contained in the framework of the 12 basic functions designated as parts of a total vocational education system. While states' modus operandi have changed somewhat under the 1976 legislation, the basic principles of vocational education have remained relatively constant, as have the 12 functions, which bear reiteration here. These functions are diagrammed on the following page.

A sample of the form that has been used for this descriptive process is included here, however it has been subsequently outdated by the 1976 legislation, and is under revision; but the basic concepts are still valid. The end result is still moot in many states although the district program must be an integral part of the process of self evaluation and program review (note in the example, that review and evaluation are central to the total process and impinge on all other activities).

Technique 3: Self Evaluation

An important part of the self evaluation procedure is a validation of the analysis by a "verification team" of practitioners from outside the district being reviewed (the term "evaluation" is not used in this procedure). The district is provided with sets of self-study forms several weeks in advance of the team visit so that they may review themselves and place a "grade" upon their preceived performance in several areas of activity. The purpose of the validation team is to spend three days in the district interviewing teachers, students, administrators, school board members, advisory committee members, businessmen, and other lay people. The districts' own self evaluation forms are carefully reviewed and analyzed.

VOCATIONAL EDUCATION FUNCTIONS AND ACCOUNTABILITY



SELF EVALUATION

PERFORMANCE REVIEW - EDUCATIONAL ACCOUNTABILITY FUNCTIONS

Instructions to Respondent: Please carefully consider questions in Part E-1 before rating performance on each of the following criteria and completing the narrative summary on the reverse side.

CRITERIA	PERFORMANCE 5	4	3	2	1	0
1. PROGRAM REVIEW: Reviewing current and proposed vocational education offerings in relation to the total school program.						
The district:						
a. Establishes procedures for the review of all existing vocational education offerings and for consideration of proposed new offerings.						
b. Develops evaluation criteria for deciding to continue, modify, or delete existing vocational education offerings and for determining whether new offerings should be added.						
c. Relates its decisions to areawide program planning, in the interest of coordination of resources and services.						
2. EVALUATION: Ongoing and periodic assessment of how well the district is performing its vocational education functions, as a basis for program improvement and management decisions, both locally and at state and national levels.						
The district:						
a. Establishes and fixes responsibility for evaluation of the processes and products of the vocational education system on a continuing and periodic basis.						
b. Provides for the periodic evaluation of the district's performance of the 12 functions of vocational education.						
c. Obtains and interprets evaluative data on a continuous basis for use in adjusting system operations.						

CRITERIA	PERFORMANCE 5	4	3	2	1	0
d. Provides resources and services to assist district vocational education personnel in the development of measurable objectives, evaluative criteria, and the on-going collection of supporting evidence.						
e. Provides resources and services to conduct periodic evaluation studies.						
f. Provides for the collation and dissemination of evaluative results.						

PERFORMANCE SCALE: 5=We are proud of this.
4=Most of our objectives are being met.
3=This is less than satisfactory.
2=This area needs attention.
1=We are not providing for this.
0=Not applicable.

At the conclusion of the visitation the validation results are orally presented by the committee, including a series of commendations and recommendations relating to the 12 functional areas. A true self-evaluation then, is conducted along structured lines relating to certified objectives, goals, or outcomes and is validated by a group of outside experts in the field being reviewed. There are some common sources of error that may introduce themselves into a self-study-validation process. They are:

The Halo Effect

This is the tendency for an irrelevant feature of a unit of study to influence the relevant feature in a favorable or unfavorable direction. Typically, a strong initial positive or negative impression of a person, group, or event tends to influence ratings on all subsequent observation. Impressions formed early in a series of observations often affect later observations; or impressions based on high or low status attributes of the unit of study affect observations on unrelated attributes--quoting a celebrity's opinion on an educational issue or associating emotionally-loaded labels with candidates in a hotly contested school board election. The more vague and impressionistic the variable to be rated, the more powerful is the effect; the more specific and clearly defined the variable, the less evident is the effect.

Rating Errors

In addition to the halo effect three other tendencies plague the validity of ratings:

1. The over-rater error--rating subject in general on the side of leniency or favorableness.
2. The under-rater error--rating subjects in general on the side of severity or unfavorableness.
3. The central tendency error--rating subjects toward the middle of the scale. This often occurs when the observer is unfamiliar with or uncertain about what is being rated.

The Hawthorne Effect

In an industrial efficiency study performed at the Hawthorne plant of Western Electric in Chicago during the 1920's it was observed that to single out a group of workers for a special research project makes them feel and act differently compared to regular workers. The effect of this was to bring about a consistent increase in productivity in spite of changes in the working conditions intended to both increase and decrease efficiency. Explanations for this effect point to the factors of: (1) novelty; (2) awareness that one is a participant in an experiment; (3) a modified environment involving observers, special procedures, and new patterns of social interaction; and (4) knowledge of results in the form of daily productivity figures and other feedback, ordinarily not

systematically available.

The Experimenter Bias Effect or "Self-Fulfilling Prophecy" in Evaluation

Well documented in the literature, this is the bias an evaluator is inclined to project into his methodology and treatment that subtly shapes the data in the direction of his foregone conclusions. What the evaluator "expects to see," where he directs his attention, what he ignores or forgets, what he remembers or records, and even the way he interacts with subjects to alter their own expectations and motivational states, all can influence the results to fit his preconceptions.

Advantages of Self Evaluation

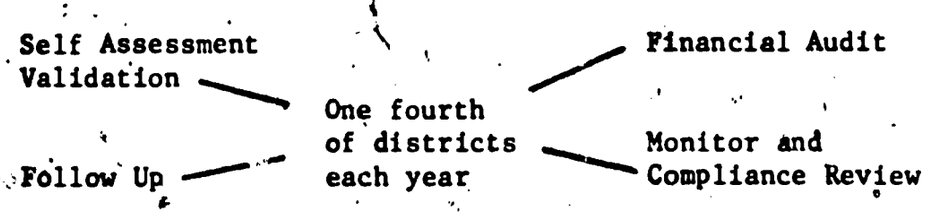
a. Responses, if truthful, may be readily interpreted, and inferences are not necessary.
b. Sample can be small and still capture what participants believe and value.
c. Responses to such measures may be supplied anonymously; thus "valid feelings" may be anticipated. (in a small vocational program it may be difficult to retain anonymity)

Disadvantages of Self Evaluation

a. The results will almost surely carry a subjective bias.
b. The data are naturally affectively oriented, and thus difficult to verify.
c. Data often are gathered by oral reporting and may be subject to misinterpretation.

A State Plan

A new plan presently operating in one state for overall evaluation will depart somewhat from past procedures but will still rely heavily on the descriptive and self-study aspects. Since the new law (VEA 1976) provides that all programs must be evaluated each five years, there must be some activity going on at all times in at least one fifth of the school districts. The plan being used consists of the following system - on a four year cycle, since the plan was one year late in being implemented - and will carry through until a new appropriation is made - for example:



A copy of a proposed useful instrument follows, for the self assessment and subsequent site validation. This reactionnaire is most directly concerned with a subjective judgement of individual vocational education programs and thus has its limitations. It may be useful in providing local evaluators with ideas for developing their own surveys to meet state requirements.

State Department of Education
Vocational Education Self-Assessment
Group I (1979-1980)
Form _____

Return two copies of Form A (School) and two copies of Form B (Program) for each Vocational Education Program maintained by the school to the appropriate regional office by November 10, 1979.

LEGAL NAME OF LOCAL EDUCATIONAL AGENCY (LEA)	County	District	School
	— —	— — — — —	— — — — — — —
NAME OF SCHOOL	Refer to the _____ Public School Directory for CDS Code Numbers		

36

Certification

I hereby certify that, to the best of my knowledge and belief, the information contained in this school report is correct and complete.

SIGNATURE OF DISTRICT SUPERINTENDENT			Date
SIGNATURE OF SCHOOL PRINCIPAL			Date
SIGNATURE OF PERSON COMPLETING FORM A (SCHOOL)	Position or title	Telephone ( )	Date

DIRECTIONS: One Form A Vocational Education Self-Assessment (school) will be submitted by each school or other organization having Vocational Education Programs. Please supply the descriptive information requested.

Form B should be distributed to all programs designated. When the Form B's have been completed they should be attached to the Form A and returned to the designated regional vocational education office.

FORM A SCHOOL
Vocational Education Self-Assessment (School)

1. Please make any necessary corrections to school address label (including school code number).

2. Type of enrollment:

___ Grades 7 & 8

___ Grades 9-12

___ Adult

3. Total number of students that will be served this year in your school?

Total Enrollment ___ ___ ___ ___ ___

4. Does your school have a specialized vocational guidance program for students?

___ Yes ___ No

5. Total number of guidance personnel:

___ ___ ___

6. Total guidance personnel with pupil personnel credentials:

___ ___ ___

7. How many of the credentialed guidance personnel have specific vocational guidance preparation?

___

8. Does your school provide job placement services to vocational students?

___ Yes ___ No

If Yes, check the type of placement service available:

____ Cooperative program between school and state employment service

____ Vocational teachers make referrals

____ Counselor assistance

____ Other (specify)

If answer is No; are such services provided via a centralized district office?

___ Yes ___ No

9. Does your school have an annual and long range plan for vocational education?

___ Yes ___ No

If answer is No; does such a plan exist at the district level?

___ Yes ___ No

FORM B PROGRAM SELF-ASSESSMENT

School Code __ __ __ __ __ __ __ __ __ __ __ __ __ __ __   Date __ __/ __ __/ __ __
Month   Day   Year

Instructional Program Title ______________________________
(What do you call this program?)

Vocational Program Area ______________________________
(Agriculture, Business, Home Ec., Trade and Industrial, etc.)

Vocational Program Code __ __ __ __ __ __

Person Completing this form ______________________________

38

Telephone (   ) ____________________

****

DIRECTIONS:

This form should be completed by an instructor who teaches in the program. It is expected that the instructor selected will teach one of the principal skill acquisition courses. The form should be completed in not more that 30 minutes.

When the form is completed, it should be returned to the school <u>official who has completed Form A</u> to be packaged and forwarded to the appropriate regional vocational education office.

I. GENERAL PROGRAM DESCRIPTORS

	Yes	No
1. Level of training (check one only)		
Grades 7 and 8	___	___
Grades 9-12	___	___
Adult	___	___
Other _____	___	___
2. Is your instructional program composed of:		
A series of separate specialized courses?	___	___
A single course?	___	___
Other _____	___	___
3. When is this instructional program offered?		
Day only	___	___
Night only	___	___
Both day and night	___	___
4. Does your instructional program operate at times other than during the regular school year (September through June)?	___	___
5. What is the duration of time, in weeks required for a student to complete this instructional program?		
Number of weeks	_____	
6. How many clock hours of classroom training or instruction are required for a student to complete this instructional program?		
Clock hours	_____	
7. Do you have an operational procedure for determing whether sex fairness prevails in this vocational education program?	___	___
If yes, is there evidence in terms of alteration of historical sex proportion trends or other evidence that indicate that present procedures are effective?	___	___

II. AVAILABILITY OF INFORMATION FOR PLANNING

	Yes	No
8. Do you regularly receive and use information about the characteristics (status in school, test information) of present students?		
Receive	___	___
Use	___	___
9. Do you regularly receive and use information about the characteristics or potential students (from feeder schools, drop outs, etc.)?		
Receive	___	___
Use	___	___
10. Do you regularly receive and use information about the labor market?		
Receive	___	___
Use	___	___
11. Do you have access to information about your teaching specialty on a regular basis?	___	___
12. Do program instructors have the opportunity to interact directly with your vocational education advisory committee?	___	___

13. Do you have current and projected skill requirements for the programs you teach? ___

14. Are you regularly provided with information about the identity of and the special needs of disadvantaged students?

Identity ___

Needs ___

15. Are you regularly provided with information about the identity of and the special needs of the handicapped?

Identity ___

Needs ___

III. PLANNING PROCESSES

16. Do you actively participate in planning the content of proposed courses? ___

17. Do you actively participate in the selection of courses that will constitute a program sequence? ___

18. Do you regularly participate in overall vocational education planning for your school and district? ___

19. Do you participate directly in the budget process that supplies resources for your programs? ___

20. Indicate the year in which the last analysis was done to determine the occupational competencies that need to be taught.

This year ___
Last year ___
Two years ago ___
More than two year ago ___
Unknown ___

21. Based on the above analysis have written student performance objectives been developed for this instructional program? ___

22. Indicate the year in which the next analysis will be done to update the occupational competencies that need to be taught.

This year ___
Next year ___
Within the next two years ___
More than two years from now ___
Unknown ___

23. Indicate the year in which manpower data was last secured to determine the extent of potential employment opportunities available to program terminees.

This year ___
Last year ___
Two years ago ___
More than two years ago ___
Unknown ___

24. Indicate when it is planned to next secure manpower information to revise estimates of potential employment opportunities for program terminees.

This year ___
Next year ___
Within the next two years ___
More than two years from now ___
Unknown ___

25. Does your instructional program have an advisory committee? ___

26. What is the composition of your advisory committee for this instructional program?

Check the appropriate boxes

Business-industry representatives ___

Labor union representatives ___

Parents and/or students ___

School personnel ___

Other (specify) _____ ___

IV. PROMOTION

27. Do you share in the responsibility for communicating vocational education plans:

To your school ___ ___

To school district administrators ___ ___

To the general public ___ ___

28. Does anyone actively recruit students for your programs? ___ ___

29. Does anyone encourage disadvantaged and handicapped students to enroll in your programs? ___ ___

30. Do your program instructors have difficulty in maintaining a cooperative relationship with counselors? ___ ___

V. MANAGEMENT OF INSTRUCTION

31. Do you furnish papers certifying performance of successful program completers? ___ ___

32. Do you use a written, approved curriculum guide? ___ ___

33. Do you use performance objectives as a basis for instruction? ___ ___

34. Do you help to provide your students with organized subject-matter oriented club activities as a part of their instuctional program? ___ ___

35. Do you provide learning alternatives in keeping with individual needs, abilities, and preferences? ___ ___

36. Do you encourage students to consult with you when selecting their personal educational objectives? ___ ___

37. Do you assist students in frequent assessment of their own acheivement? ___ ___

38. Do you provide students with periodic progress reports? ___ ___

39. Does the school provide you with time to coordinate and supervise students in cooperative vocational education or vocational work experience education? ___ ___

40. Does the school provide you with time to attend advisory committee meetings? ___ ___

41. Does the school provide you with time to sponsor subject-matter related youth organizations? ___ ___

42. Does the school provide you with time to attend professional meetings and workshops that will enable you to maintain or enhance teaching skills? ___ ___

43. Does the school provide you with time to visit appropriate business or industrial operations to make placement contacts and to learn current skill requirements? ___ ___

44. Does the school provide you with time to plan curriculum and instructional materials? ___ ___

45. Has the school provided you with standards for student behavior? ___ ___

46. Has the school provided you with standards for student performance? ___ ___

47. Does this instructional program provide students with out-of-class laboratory experience? ___ ___

Note type(s)

Cooperative vocational ed. ___

Vocational work experience ___

Community classroom ___

Other (specify) _____ ___

_____

48. Are there specified course prerequisites for admission to this instructional program? ___ ___

49. Are there grade level requirements for admission to this instructional program? ___ ___

Specify grade level _____

50. Are there age requirements for admission to this instructional program? ___ ___

Specify age requirements _____

51. Are there specified student achievement levels required for admission to this instructional program? ___ ___

Note type(s)

Special test ___
Grade point average ___
Other (specify) _____ ___

52. Are there specified student achievement levels required to remain in this instructional program? ___ ___

Note type(s)

Competency test ___

Grade point average ___

Other (specify) ___

_____

53. Is specialized remedial instruction made available to vocational students in this program who have educational deficiences? ___ ___

54. Is additional specialized vocational instruction made available to vocational students in this program who have educational deficiences? ___ ___

55. Check one or more items which best describe the source of the curriculum materials used in this instructional program:

Original or adapted by local staff ___

Standard state curriculum guide ___

Commercially prepared materials ___

Borrowed from similar program ___

Developed by special agency or association (specify) _____ ___

Other (specify) _____ ___

56. Are there any vocational students from non-profit private schools enrolled in this instructional program? ___ ___

Number of students _____

VI. PROGRAM UTILIZATION DATA

57. What is the potential enrollment in this instructional program? (Student capacity times the number of sections)

	Number of Students
9th and 10th	
11th and 12th	
Adult	
Other (specify)	

Were students denied training this year due to limited facilities or capability?

9th and 10th	
11th and 12th	
Adult	
Other (specify)	

VII. PLACEMENT

58. Do you regularly provide occupational information to your students? ___ ___

59. Do you regularly provide occupational information to counselors? ___ ___

60. Do you utilize your advisory committees for help with placement? ___ ___

61. Indicate the type(s) of structured placement services provided by the school which this program uses:

Cooperative program between school and state employment service	___ ___
Vocational teacher referral	___ ___
Counselor assistance	___ ___
Other (specify) _____	___ ___

_____

VIII. FACILITIES

62. Are you provided with the following in sufficient quantity and quality for conducting an effective instructional program?

Spaces	___ ___
Materials	___ ___
Equipment	___ ___

63. Do you participate in the selection of instructional equipment and materials? ___ ___

64. Do your classrooms have adequate:

Heat	___ ___
Light	___ ___
Ventilation	___ ___

65. Do you have adequate storage for security of materials and equipment? ___ ___

66. Is your equipment typical of that used in industry? ___ ___

CASE STUDY NO. 3: FOLLOW-UP

The follow-up study has been a vital part of vocational education evaluation for several years. It is mandated through federal legislation and is carried on in one form or another in each of the 50 states. The techniques described here most particularly relate to the reporting requirements as they have been exercised in one State as seen from the local school district level. The district must collect certain information to meet requirements and be in compliance. Beyond that, it is possible for the LEA to construct a questionnaire that will provide additional information of value to local program planners and decision makers. This additional information can combine both process and product factors that are helpful in program improvement.

The Morrison Unified School District, recognizing this fact, constructed a questionnaire and telephone technique that has produced a very high and reliable response rate. Several evaluation schemes are illustrated by the Morrison experience, although follow-up per se is the only one discussed here.

Technique 4: Follow-Up

As stated, the follow-up process is a required activity in vocational education for all students who have completed a program and left school. In a sense this is strictly a compliance-type activity. The follow-up (in the fall, for the previous June's program leavers) is required; therefore it is done by districts accepting VEA funds. This is not to imply the follow-up system is not good; it is simply poorly done in many cases and is excessively shallow because of its use only for a one year period. A truly valid follow-up should extend over a several year period and should incorporate both vocational students as well as non-vocational students. But, alas - this will require the time of a graduate student who has the time and complete diligence to prepare a five year doctoral research - or it will require the time and talents of a highly motivated researcher to devote his efforts to the detailed task of tracking students over a five year period. In either case, it seems the opportunity for truly significant results in this regard may be slow in coming.

However, since follow-up, as an evaluation technique, is in fact done each year, it behooves us to review a few of the practices involved. The first of these principles is "follow-up" itself. Is it a good technique, and may valid results be derived from it? The answer is yes - but we must assume certain qualifications for this statement. It must be done carefully and the questionnaire must be created in a way it will be easy to understand and also elicit the required information. A "one shot" questionnaire mailed to program graduates will probably generate no more than a 10% to 25% response at best. This certainly will not give us a true picture of the effects of vocational training. The small percentage who do respond to such a request may be extremely skewed or biased. That is, perhaps certain ethnic groups or socioeconomic groups respond more readily than others, or perhaps the employed individual replies more frequently than the unemployed person. The possibilities for bias are many. A preferred technique is probably a combination of a telephonic survey, coupled with a questionnaire mail-out.

The Morrison district, after several years of disappointing results, developed such a method. A questionnaire was prepared which would supply all the information required by the state as well as additionalinformation required by the district for a part of its own program evaluation.

Characteristics of a Good Questionnaire

a) It deals with a significant topic, one the respondent will recognize as important enough to warrant spending his time on. The significance should be clearly and carefully stated on the questionnaire or in the letter that accompanies it.

b) It seeks only that information which cannot be obtained from other sources such as school reports or census data.

c) It is as short as possible, only long enough to get the essential data. Long questionnaires frequently find their way into the wastebasket.

d) It is attractive in appearance, neatly arranged, and clearly duplicated or printed.

e) Directions are clear and complete, important terms are defined, each question deals with a single idea, all questions are worded as simply and as clearly as possible, and the categories provide an opportunity for easy, accurate, and unambiguous responses.

f) The questions are objective, with no leading suggestion as to the responses desired.

g) It is easy to tabulate and interpret. It is advisable to preconstruct a tabulation sheet, anticipating how the data will be tabulated and interpreted, before the final form of the question is decided upon. This working backward from a visualization of the final analysis of data is an important step in avoiding ambiguity in questionnaire form.

The Morrison technique called for all students who had completed programs, to be telephoned - at night, when they were most likely to be home. The interviewer asked the questions over the telephone and recorded them on the questionaire forms. Three tries were made to contact students in this manner. After that time, if a successful contact was not made, a questionnaire was maile In two more weeks, if no response was received, a second mail-out was performed. The result has been a 75% response rate for each of the two years the system was used (research has shown that a response rate of less than 70% is probably not reliable). Certainly the procedure is time consuming and is fairly costly; especially considering the computerized processing of final data. In such a case, an educational agency must weigh what it feels it should do for mere compliance versus what is must do for derivation of good data on which to rely for program continuance, modification, or termination.

Questionnaire Construction

The state, through its federal influence, requires information about vocational program leavers. The basic items they requre are:

Is the former student:

Working full time?
Working part time?
Is job related to vocational course?
Attending school?
Looking for a job?
In the Armed Forces?
Seeking work?
Not seeking work?
Not in labor force for other reasons?

This type of information is useful and does provide one measure of program success. Each school district is left the prerogrative of designing its own questionnaire to elicit the information required. This questionnaire, if mailed, must be easily understandable, since it is inevitable someone will misinterpret items on even the most carefully prepared instrument. The example shown represents the collective thinking of several people over a period of two weeks, and the results obtained from it appear to bear the fruits of careful thought and preparation ahead of the actual follow-up process. It was printed on green paper (which some people feel is an incentive for larger responses, although this may never have been actually proven). Also, its general lay-out, including the heavy black "tracking arrows" are helpful to the former student in making his responses. A simplified layout is also helpful to telephone interviewers, who themselves may not be highly trained or very familiar with the programs upon which they are seeking responses.

The Morrison staff felt that more information than the state required was actually needed to measure program effectiveness. Hence other questions were added. For example, question 5 seeks to determine the reasons for the individual having taken the course in the first place. It seemed to the planners that much more weight should be attached to employment results if the student originally took the class "to prepare for a job" (item 5a). On the other hand if his reason for taking the class was "to see if I liked that career area" (item 5d), it would appear as if a lower related employment count would not be as significant. Other questions too, were added such as numbers 7 through 12. These questions reached beyond the original requirements and sought to bring in some information that would be helpful in evaluating parts of the instructional phase of the program; that is, process evaluation versus product evaluation.

The main points to be made with regard to questionnaire construction are that each instrument will be carefully tailored to meet the needs of those who desire to obtain information, it will be prepared for ease of administration, it will be prepared for ease of tabulation of results, and it will be prepared for eliciting the greatest possible response.

Sampling Versus Total Coverage

A stratified random sample may be used to conduct follow-up studies of total district vocational program effectiveness. The posture assumed in this manual is that total coverage is a better approach. The reason for this is that if gives the district the capability to have a more complete file on a larger segment of its graduates; thus permitting the opportunity to provide employment and other assistance to them in the years after they leave school.

Advantages of Follow-Up:

a. Can potentially get nearly total coverage of a population.
b. Not as time consuming as interviews.
c. Gets answers to exact questions upon which one requires information.
d. A wide range of people and occupational types can be covered.

Disadvantages of Follow-Up:

a. Responses may be in favor of one type of bias.
b. There may be sampling errors (if a sampling technique is used).
c. Response rate will be low unless process is repeated and/or combined with telephone techniques.
d. Can be costly if the full potential of item c is exercised.

VOCATIONAL EDUCATION
LONGITUDINAL FOLLOW-UP STUDY
Morrison Unified School District
Career Education Unit

Please answer all questions that apply to you by marking the appropriate space and adding the information requested. Additional comments may be made in the space provided on the reverse side of this questionnaire. The vocational class referred to in the questions is the one in which you were enrolled as indicated on the label above. Return immediately in the enclosed self-addressed, stamped envelope. Thank you.

1. Did you complete the course printed above?.....yes( ) no( )

2. If no; what vocational course did you complete?_____

Regardless of the name of the course you completed, would you please answer the following questions?

3. Are you still attending high school?.....yes( ) no( )

4. Are you in the armed forces?.....yes( ) no( )

5. What was your reason for taking the course? (Mark one space only)
   a. To prepare for a job.....( )
   b. To prepare for advanced training.....( )
   c. To improve existing job skills.....( )
   d. To see if I liked that career area.....( )
   e. To learn a skill for my personal use.....( )
   f. Other.....( )

6. Are you presently employed?.....yes( ) no( )

IF YES

6A. Is this your first job since leaving school?.....yes( ) no( )

6B. Is your job:
   a. Full-time.....( )
   b. Part-time.....( )

6C. How closely is your job related to your vocational course?
   a. Very closely.....( )
   b. Somewhat.....( )
   c. Not related.....( )

6D. Please print your job title here:

_____
(For example: Sales Clerk)

6E. Are you also attending school?
   a. Attending full-time.....( )
   b. Attending part-time.....( )
   c. Not attending school.....( )

6F. If you are in school is your course of study related to the course which you took?.....yes( ) no( )

IF NO

6AA. Have you been employed since completing the course?.....yes( ) no( )

6BB. What is your present situation?
   a. Looking for a job.....( )
   b. Not looking for a job.....( )
   c. Attending school full-time.....( )
   d. Attending school part-time.....( )

6CC. If you are in school, is your course of study related to the course which you took?.....yes( ) no( )

7. Did the vocational course which you took provide an understanding of future careers in that area?.yes( ) no( )

8. Do you feel you received an employable skill from the vocational course?.....yes( ) no( )

9. Did the course offer instruction on how to look for and apply for a job (in terms of applications, interview techniques, and sources of employment information)?.....yes( ) no( )

10. Did the course offer instruction on how to keep a job (such as, being on time, using appropriate dress and grooming, and getting along with people)?.....yes( ) no( )

11. Was placement service offered to you?.....yes( ) no( )

12. If you were asked to assign an overall "grade" to your vocational course of instruction, what would it be?
   A ( ) B ( ) C ( ) D ( ) F ( )

10/76
Form 45

CASE STUDY NO. 4: PROJECT LINKAGE

High school students with learning disabilities (educationally handicapped) have traditionally been taught, in accordance with state law, in classes limited to an enrollment of 12 to 15. This is the opposite of so-called "mainstreaming," where the students are placed in regular classes with peers of more equal abilities. Either of these two methods of instruction has certain inherent problems. In the first instance, the small classes are often placed in a school campus location that is not physically desirable. In any case, wherever the class is located on a regular campus, the handicapped students may feel a sense of isolation and are often referred to as "different" by the rest of the student body. In the second instance, "mainstreaming" can cause serious problems with learning disability-type youngsters because it is difficult for them to keep up with the stiffer competition from regular students.

The Clayburne Unified School District, in an effort to provide an alternative format, prepared an application for funding under Title IV-C of the ESEA Act. The funding was approved, and the program commenced operation in July 1977. The two principal things that set this program apart from other such classes were:

1. It was to be taught in a location removed from a conventional school setting.

2. It was to have a career exploration and vocational educational component.

Edgewater University, a private school located in the middle of the Clayburne School District, volunteered the use of one of its classrooms for the students' use, thus removing them from a traditional high school setting.

The district paid the salary of one of its regular special education teachers, but his two aides, student transportation, instructional materials and evaluation were paid from IV-C funds. Since this was the case, certain types of project components were required by IV-C, and the forms used in the evaluation reports were rigidly structured. A fair amount of ingenuity was allowed, however, in the methods of collecting and interpreting the data needed to measure the objectives, as well as in the final narrative report.

The Project consisted of seven basic components, which were:

- o Instruction (basic skills)
- o Increased self-concept
- o Work exploratory participation
- o Increased interpersonal social skills
- o Inservice training for teacher
- o Parent awareness (2 components)

This project followed the usual state Title IV-C guidelines for program preparation and for evaluation design and reporting. The important evaluation considerations for us to look at here are: "comparison groups and sample size", as well as the requirement for standardized testing.

Technique 5: Comparison Groups

In order to effectively observe any changes in behavior of a group of students, it is first necessary to establish baseline data against which to make meaningful comparisons. Such data establish what the subjects were like before the treatments began. Common procedures for gathering baseline data are the pretest and the comparison group. The latter is important where there is an expected treatment effect and the absence of treatment is the baseline.

The comparison group should be matched with the test or experimental group in every aspect except for the treatment being offered. For example, in the case of Project Linkage, the ideal situation would have been that both test and comparison groups had the following points in common:

1) - Twelve students in each class.
2) - All 11th graders.
3) - Equal amounts of boys/girls and minority/non-minority.
4) - All students certified roughly to equivalent ability levels.

The only difference should be, one group receives a treatment somewhat different than the other group (test class versus comparison class). In the case cited, of only 12 students permitted by state law in each class, the validation of a bona fide comparison group, meeting all criteria, was difficult. However, the principles of comparison group/test group analysis were adhered to completely and were accomplished within the realms of type of student served and relatively small "N"s to work with. Sample size is being dealt with in another case study (No. 6), where a scientifically developed method for determining a valid sample is displayed.

In a case such as Project Linkage, the usual state requirements dictated pre and post testing with a norm-referenced test "to be selected by the evaluator." This brings up one of the dilemmas facing the local evaluator; what test to select, and does the selected test actually measure the outcomes to be analyzed in relation to the projects' objectives? In a case such as Linkage, where the total N was so small the sample size in effect had to be the entire experimental class. The selection of a comparison group was even more difficult. Since the law prescribed only 12 students per class, it was impossible to find a single group in the city schools that matched the requirements completely (i.e. all 11th graders, boy/girl, black/white, etc.). Therefore, it was necessary to draw the comparison group from two other classes (in two schools) to attain a reasonable match with the test group. This is an atypical situation, and is not recommended from a purely research point of view. However, from the position of the day-to-day realities of field evaluation, it is illustrative of the need to often stray from a research posture to attain the ends of doing a reasonably creditable job of evaluation within the constraints of state requirements dictated by categorical funding sources.

Advantages of Comparison Groups:

a. Allows a good gauge of treatment effects.
b. Reduces chance of error in collecting valid data in experimental designs.
c. Allows baseline data to be collected (when absence of treatment is the baseline).

Disadvantages of Comparison Groups:

a. Difficult to match on all variables but for the one to be tested.
b. Not always possible to get a renodmized group.
c. Difficult for comparison group to "experience all things" except for the critical factor.

Requirements for Standardized Testing

Standardized testing, using a nationally normed instrument, is virtually a "must" on any project receiving federal or state funds. This is true despite the fact non-standardized measures of effectiveness are often much more appropriate in vocational programs. Some of the qualities that vocational classes seek to create in students are difficult to assess with academic achievement tests. Nevertheless the general public as well as members of the state educational hierarchy usually look at academic achievement as the single most important item in any public school program. Usually the evaluation guidelines of any project receiving extracurricular funds will require standardized testing. Even if an evaluator is utilizing a design of his own choosing he would still be well advised to build in a standardized testing component. Or if this is not feasible he should at least provide some sort of comparison of vocational student performance at criterion levels with his test score history. In a climate of national concern over declining test scores the best way to sell vocational education is to show it shelps (or at least doesn't impair) performance in the basic skills of reading and mathematics.

Displaying Test Results

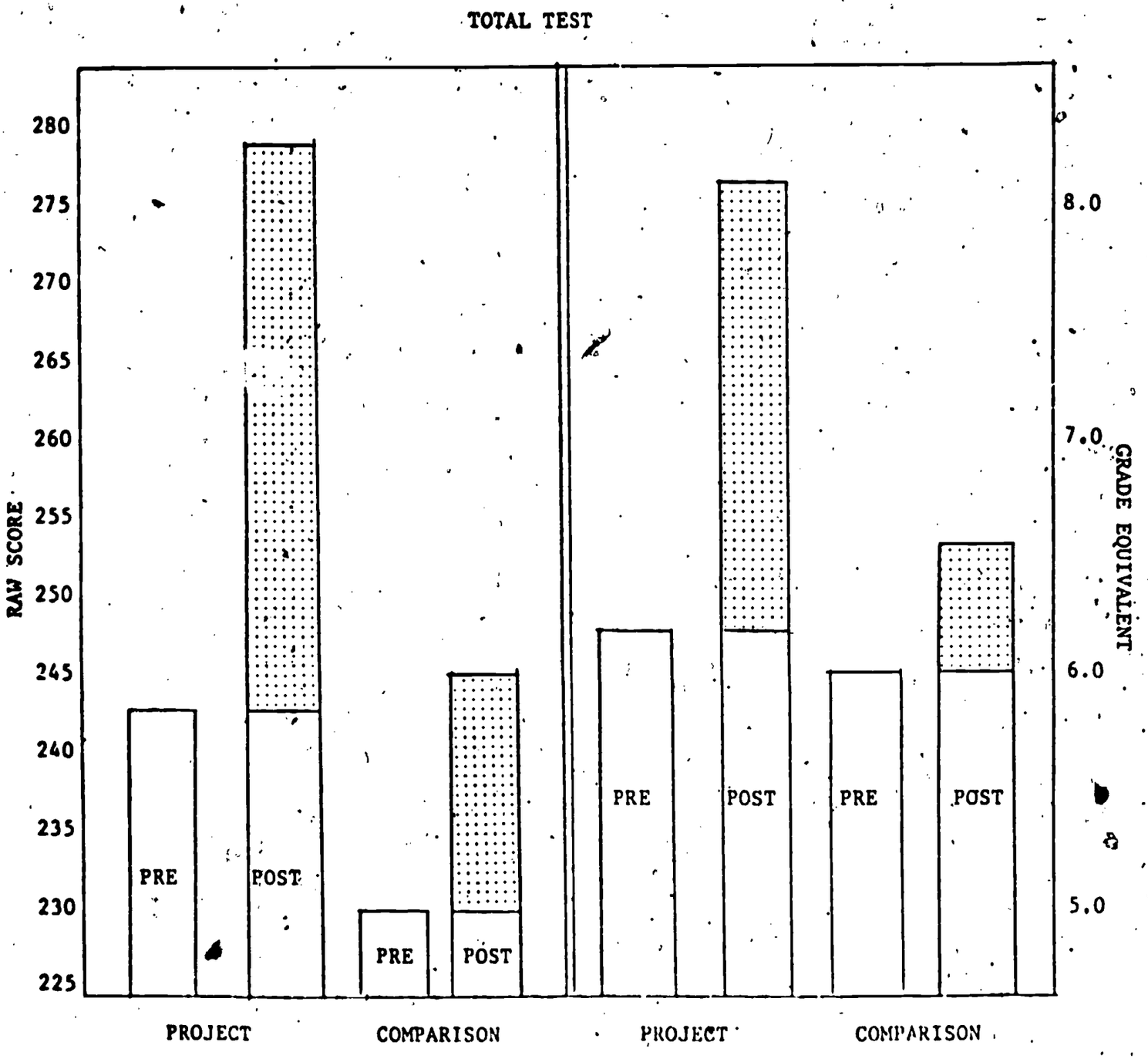
Test results, even for such a small project, may be tabulated and displayed in a variety of ways. If the gains of treatment group over comparison group were especially significant, it is to the advantage of the evaluator to show these gains as dramatically as possible. The following chart illustrates the bar graph method of display which emphasized the growth of one group over another in easily understandable form.

Structured Interview

The structured interview technique was described in Case Study 1, although there it applied to a very broad base of interviewees. On smaller projects or individual programs it also is often useful to employ the interview. For example, in LINKAGE, one of the components, as noted, was "inservice training for the teacher." Since the inservice training was of an informal nature it was difficult for the evaluator to determine the gains in teacher knowledge over time without using an interview process. In this case the interview form was quite simple, but it served its purpose as it was intended; to provide a degree of form and structure to the talks (one at the beginning of the year, one at mid-point, and one at the end). A tape recorder was always used. This is a valuable tool; but be sure it is used with the permission of the respondent. A sample structured interview form is shown.

The interview gives an opportunity to measure the "practitioner variable"—those characteristics of teachers and instructional support staff which reliably indicate the status, quality, and progress of the implementation process. It may also present an opportunity for a retrospective review to help develop a reasonably complete account of events leading up to the current status of a project.

PROJECT LINKAGE
MEAN RAW SCORE AND MEAN
GRADE EQUIVALENT: PRE-POST
PROJECT CLASS vs. COMBINED
COMPARISON GROUP
1977 - -1978



NOTE: Shaded area indicates amount of growth

CLAYBURNE CITY SCHOOLS
PROJECT LINKAGE
SPRING, 1978

STRUCTURED INTERVIEW WITH PROJECT TEACHER

NOTE: One of the components of the original project related to staff development and improvement of skills on the part of the teacher. It was initially decided the only way to accomplish an evaluation of this phase would be through a series of formal and informal interviews; evaluator and teacher. The purpose of this end-of-year interview is to attempt to gain insights into the "Pulse of the Operation", over and above the hard data required in the year-end IV-C reports.

1. We were required to do standardized testing for academic achievement and attitude development. What other things do you see as allowing us to get a "feel" for how the project is really doing? Please list: e.g. drop outs, attendance, and law enforcement violations.

2. Originally we had talked about using the CTBS and other standardized measures. We ended up with the PIAT and KEY MATH. Do you consider these good measures of achievement for your kind of student?

3. Also we needed to measure social skills. You and your staff came up with the ATTITUDE INVENTORY for this purpose? Was it satisfactory and would you recommend it for the future?

4. In July we agreed all of us were starting at "ground zero" on curriculum. Please list a few examples of what we are using now and state how useful you feel our materials will be for ultimate dissemination.

5. What are two or three of the major "problems" encountered during the year, and how did we solve them?

CASE STUDY NO. 5: BUSINESS CAREERS

A vocational "program" is usually definded as a series of courses (or sometimes only a single course), bearing a six-digit U.S. Office of Education code number, and leading to a so called saleable skill at the completion of the series. It is a sponsored activity, more often than not from public funds; aimed at mitigating a social or educational problem or improving social or economic welfare. A common characteristic is that programs are ultimately concerned with change. If a vocational program does not develop a skill as such, it at least should give a solid base from which the student can branch off to a related skill development course that will provide a more indepth training. Business Careers was just such a one semester course which was adopted in nearly all of the high schools in the Henderson Unified School District.

Henderson is one of the largest cities in its state, and at the time of the adoption of Business Careers, had twelve comprehensive high schools and three alternative high schools. The program was adopted in all but three of the 15 school total. The evaluation of this program extended over a three year period, but it is basically the activities of the last year that we shall illustrate here. Many evaluation techniques were used to bring in both qualitative and quantitative data from several sources. The two techniques to be particularly illustrated are "Criterion Testing" and "Item Analysis." The comprehensive schools were representative of the city; running the gamut from upper middle class neighborhoods to schools with a high degree of disadvantagement. The three alternative schools were the career education high school which is a citywide model, and the two continuation schools. There was therefore, a broad representation of students and schools. The state in which the Henderson District is located developed a common core of 18 competencies in business education and further developed a program guide including objectives, criterion outcome levels, tests, broad lesson plans, etc. The local district, through a steering committee of teachers, modified and adopted the guide for its own use. The 18 basic competencies in the common core business program were:

Adding Machine	Dictionary
Data Processing	Telephone Directory
Grooming	Zip Code Directoy
Handwriting	Simple Business Records
Instructions	Sort, Check, Verify
Job Application	Spelling
Making Change	Telephone
Math Computations	Work with People
Oral Communication	Written Communication

Each of these competencies had a LAP (Learning Activity Packet) prepared by a committee of teachers. These packets allowed each individual student to work at his or her own pace and were designed to assist the student in achieving the desired criterion level of performance.

Technique 6: Criterion Testing

The first step in criterion testing is obviously to define the competencies to be tested and then establish the levels of performance that are considered necessary for mastery of the skill. In our example of 18 different skill areas, with a LAP and related test for each one, there will naturally be a number of test items to measure the level of performance. The selection of test items and level of required performance is clearly a subjective judgement on the part of the teachers preparing the materials. Ideally the most competent and "job-wise" teachers in the district should be selected for such a task. An example of criterion-based competency might be:

Condition	Performance	Standard
Given a list of 25 words and phrases, commonly used on employment forms and in test instructions and a list of definitions	the student will match the words/phrases to the definitions	with at least 20 correct responses

Therefore a criterion level of 20 correct responses out of 25 possible represents mastery of the skill. Criterion testing is not the same as standardized testing. The students are not being measured against a nationally normed group of youngsters. They are being tested strictly on the skills deemed necessary for the program, and theoretically 100% could meet the criterion level, as opposed to standardized testing where the "normal" situation would be to have one half above and one half below. In actual practice of course, it is unlikely that all students will meet the criterion performance standards. If it is found that too few students attain the desired number of correct items in any given test it may be well to re-examine the criteria and/or the test items for corrective measures. The ideal steps to follow in criterion testing would be:

1. State the evaluation criteria in clear, observable terms.
2. Build or select several measures of each one.
3. Sample items from the above measures across randomly selected subjects.
4. Use appropriate statistical techniques to analyze and evaluate outcomes.

Advantages of Criterion Testing:

a. Can use levels of items that would not be acceptable on norm-referenced tests, e.g. items on which nearly everyone gets a correct response.
b. Because items can be retained, irrespective of their contribution to response variance, the evaluator works with more descriptive measures of vocational behavior.
c. Test can be designed using items that are specifically reflective of a given vocational program.

Disadvantages of Criterion Testing:

a. Selection of items appropriate to the instruction offered.
b. Deciding on the proper criterion level to strive for.
c. Tests must often be developed by people inexperienced in construction of instruments.

Technique 7: Item Analysis

In order to determine if the test items are all "good" it is sometimes well to perform an item analysis. In terms of process evaluation this may also be helpful to the teacher in adjusting the classroom emphasis to correct a perceived deficiency in one or more particular areas of instruction.

In the case of Business Careers the item analysis was done very simply, but was adequate for the needs of program managers. The large volume of students in the citywide program (600) precluded looking at all of the tests. Therefore a random sample of students drawn from three of the schools, representing all socioeconomic groups was used. The test items were tabulated and were divided into those which were:

Answered correctly more than 75%
Answered correctly 50 to 75%
Answered correctly 25 to 50%
Answered correctly less than 25%

A somewhat more sophisticated method of item analysis of a true-false or multiple choice criterion test would embrace the following steps:

1. Rank order the distribution of test scores from high to low.
2. Divide these ranked scores into two contrasting groups. The division point is arbitrary but common practice is to split the data in half, forming the top and bottom halves; or to increase the contrast, compare upper and lower quarters. For ease of computation, use two groups of equal size.
3. Construct a four-fold table based on two pairs of categories. The first pair is simply the category wrong-right (for a specific test item); the second pair is the category high scorers-low scorers (depending on how the ranks were divided):

	Wrong	Right
High		
Low		

This method permits an analysis of test items answered in relation to the general overall scoring level of the individual student. That is, an item may be looked at in relation to how many high achievers or low achievers mastered it.

The Business Careers program people were able to use both the criterion testing and the item analysis techniques for curriculum and test improvements during a summer workshop following the close of the school year. The evaluator in this case was therefore able to exercise both process and product techniques to help with program improvement.

Advantages of Item Analysis:

a. Permits the improvement of student tests.
b. May indicate weaknesses and/or strengths in a vocational instructional program.

Disadvantages of Item Analysis

a. Consumes large amounts of time.
b. Efficacy of items for high achieving and low achieving groups may be misinterpreted.

CASE STUDY NO. 6: EXEMPLARY WORK PROJECT

Every year in this country about 100,000 men and women are released from federal and state prisons. Statistics indicate that 40% will return within one year. Since the cost of maintaining an offender in prison is about $18,000 per year (not to mention the waste of human resources), it seems apparent that there is an urgent need for a system of rehabilitation, or most specifically of "diversion," that is truly effective.

The 40% annual recidivism rate is a figure generally accepted for adults. The Bayview County Juvenile Probation Department has quoted similar statistics for teenage youngsters in their area. But indeed, many localities experience an even higher rate of return to delinquent activities. For example, the Providence Educational Center Project in Center City indicates that perhaps the recidivism rates of juveniles placed on probation could be as high as 70%. In overall terms, it seems clear from the literature that a majority of the juveniles adjudicated by the court committed further offenses.

The juvenile crime rate has been well publicized throughout the national press. It is estimated that about 25% of stranger-to-stranger crimes are accounted by youth under 16 years of age. The Clayburne Police Department made between 16,000 and 17, 000 juvenile contacts in 1975. In Clayburne one out of every nine youngsters is expected to appear before a juvenile judge before he is 18.

In response to these validated conditions the Exemplary Work Program was started during July 1975. The research and demonstration aspects of the project were to be emphasized, although a direct relationship to the criminal justice system was a provision for the release of funds. The basic hypothesis, to be examined from a research point of view, was that paid employment on meaningful jobs can be instrumental in diverting juveniles from criminal activities. In this sense it differed from most previous federal projects where education and resocialization have been the prime points of emphasis.

The Clayburne Unified School District received a grant of $900,000 (to be matched with $100,000 of local funds) from the Law Enforcement Assistance Administration to develop and pilot a paid work situation for about 500 potential juvenile offenders; also including quite a few juveniles who had known prior offenses.

The evaluation design for the 10-month project was left up to the district within certain parameters established by the Law Enforcement Assistance Administration. The design initially consisted of a variety of process measures for the purpose of determining (a) what went into the program, and (b) what happened in the program. The major part of these data were collected by questionnaires and interviews with direct project participants, i.e. students and project staff and by similar techniques with indirect participants, i.e. parents, employers, and general public. Case studies on selected project participants were also considered a part of the process phase of the data collection. Some of the questionnaires used in this phase of the evaluation are included for the purpose or providing the reader ideas for creating questionnaires of his own. No standardized or commercial measures were used in this program evaluation; all questionnaires and data collection rosters were designed by the assigned evaluator to fit the perceived needs of the project.

The second part of the evaluation, and the emphasis that was demanded by the funding agency, was "hypothesis testing". This aspect also created the greatest challenge to the innovative and creative talents of the evaluator. No guidelines or previous work was available upon which to draw ideas from the past. The hypotheses to be tested were:

1. Measure recidivism rate of 60 project participants who are known to have "priors", the recidivism rate of known priors will be reduced by 12.5% (to 35%) from the known 40% rate existing in Bayview County.

2. Measure "initial contact" of 120 project participants who are believed to be "non-priors." Rate of non-prior contacts will be reduced 12.5% (to 10.5%) from the calculated 12% probability now existing in the police beat/zip code areas served by the program.

Technique 8: Hypothesis Testing and Sample Size

The two hypotheses just outlined are clearly written in quantifiable and measurable terms. The first step in hypothesis testing is to arrive at a reasonable hypothesis of some event occuring or not occuring (null hypothesis). In the two hypotheses cited the parameters were arrived at as follows: (1) the County Probation Department showed the recidivism rate of juveniles to be 40%. (Recidivism is defined as a person being arrested for the same type of crime within a one year period after an initial arrest or release from a detention facility). Since 40% was a known figure, experts in the field of juvenile criminology were consulted to establish a reasonable reduction rate by project intervention. This introduces the basic evaluation principle of obtaining "expert Validation" of a proposed technique. (2) The probability of initial police contact of non priors was calculated by using Police Department, Juvenile Division, arrest data and comparing it with youth population in the districts served by Exemplary Work. This probability was calculated as 12% in any given year. In order to make the probability projection as accurate as possible, three year trend data were used and averaged to arrive at the 12%. Again, consulting juvenile crime experts, a 12.5% reduction figure seemed reasonable and capable of measurement.

The statistical measurement of these hypotheses was difficult at best. However some positive results were noted, especially in item (2). This presents a question which must always be kept in mind in educational evaluation.

Statistical Significance versus Practical Significance

In the researcher's zeal to obtain statistically significant findings, he often overlooks the more relevant question: Is it educationally significant? Is the difference large enough to be practical? Are the gains important enough to be worth the cost and effort to obtain them? This question gets at the trade off factor in educational decision-making and involves the problem of accountability in cost effectiveness ecomonics. Even when these practical matters are settled or in the background, there are valuable considerations of social and psychological nature that frequently override a choice based solely on statistical significance.

Comparison Groups and Sample Size

The hypothesis testing, as described, obviously dictated the need for comparison groups - that is some body of youngsters who did not receive whatever treatment the project provided. In the case study we are reviewing here the size of test and comparison groups (60 and 120) was more or less arbitrarily arrived at by intelligent discussions and understanding of what might be realistic in terms of time and personnel constraints. Comparison groups should be matched to test groups as closely as possible. That is, if the test group is made up of 30 fifteen year olds and 30 sixteen year olds; 40 boys and 10 girls; and 15 minorities, then the comparison group desirably should match the project group in all aspects - except for the treatment introduced. In this case the "treatment" was paid employment.

While the sample sizes in this case were not as precisely determined as they should have been on a sound research basis they were determined on a "what is practical basis." The following table shows how one may determine sample size in a more scientifically oriented mode.

HOW LARGE MUST A SAMPLE BE?

RANDOM SAMPLE SIZE CHART (.10 LEVEL OF CONFIDENCE)

For a Population of N	# of Cases	Take Every Nth Case	Percent of Total
10	10	all	100%
100	50*	every other case	50%
150	50*	every third case	33 1/3%
200	50	every fourth case	25%
500	60	every eighth case	12%
600	60	every tenth case	10%
750	61	every twelfth case	8%
1000	63	every fifteenth case	6%
1500	64	every twenty-fourth case	4%
2000	65	every thirtieth case	3%

*Actually the number calculated by formula is less than 50 but for convenience of choosing it is recommended that one round up to 50.

Advantages of Hypothesis Testing:

a. Permits measurement of a pre-conceived concept.
b. Permits use of comparison groups.
c. Permits statement of researcher's expectations in positive terms.

Disadvantages of Hypothesis Testing:

a. There may be other plausable hypotheses than the one(s) selected.
b. Difficult to establish proper levels of significance without prior experience in the study area.
c. Possibility of introducing error in acceptance or non-acceptance of a null hypothesis.

Technique 9: Case Study

Although some writers contend that the *"one-shot case study"* hardly qualifies as a respectable data-collection design, there are instances when evaluators might employ it. Essentially, the design involves the administration of measuring devices to a group of learners who have received some sort of educational treatment. Schematically, the design looks like this:

T ⟶ M

One-Shot Case Study

The design is referred to as a *case study* because it more closely resembles a clinical case study than anything else. The evaluator merely notes what happens to learners who have received the instructional treatment being evaluated, and previous student background factors are considered.

In this instance the case studies were only a peripheral part of the total evaluation and were not performed in depth. The full case study technique itself would be sufficient to consume the major portion of an evaluation manual. One of the sample case studies from Exemplary Work is shown. The data gathering form used by the evaluator is in the collection of forms which follows. This form was used to obtain information from people who had had contact with the subject, especially project counselors.

CASE STUDY

Lana, age 16, entered her first EWP counseling session hostile about school, but shy about discussing the problem with the counselor. She had previously been exempted from Jackson Junior High School for truancy. Her home life was not very cohesive nor did she have interested parents. Lana's mother had been ineffective in controlling her children and did not provide a sense of togetherness in the family. Once Lana was placed in a job, she reluctantly gave a portion of her salary to her family to supplement welfare benefits. The counselor detected that Lana resented donating a portion of her salary to her unemployed mother and "lazy" brothers and sisters.

In job placement counseling, Lana expressed no particular interest but though she would enjoy working with children. She was placed in a day care nursery as an aide, however, she was unhappy with this assignment because she did not feel useful. She was removed from the job and placed in a "Hold pattern" for additional counseling. During the interim, she worked temporarily in the center's office assisting the secretaries and receptionist. It appeared to the counselor that Lana became more relaxed and self-confident as she interacted with other co-workers her own age. She was then placed in a teacher's aide position at the Southeast Involvement Program. Lana was already attending classes there and the counselor felt this assignment would present a positive side of school.

During the interview with her teacher/supervisor, she commented on Lana's low self-esteem and her messy appearance. As Lana began to experience success in her classwork, receiving praise from the teacher, and recognition by other classmates, she cautiously gained confidence and began to improve her appearance. In the small group classes, Lana established an identity with a group and felt a sense of belonging. Besides the group affliation, Lana's work brought her additional attention by her peers. As she earned a salary, Lana was able to buy herself clothes. Her teacher/supervisor noticed a vast improvement once Lana began outfitting herself. Lana placed a great deal of importance on clothes; the new clothes helped boost her self-image and gain further approval. As a worker, Lana became diligent and wanted to be "kept busy." She enjoyed task-oriented duties. She indicated that she became interested in a career as a computer key punch operator.

Lana expressed her happiness with the program as a job placement and individualized personal counseling service. She felt there were too many tempting escapes, such as truancy, to help avoid attending comprehensive schools. Until her involvement with Exemplary Work, she was avoiding school and wasting her time. Her work experience and the Southeast Involvement Program helped her use her time constructively. She was able to trust her counselor and teacher to the point of seeking them out for personal help, something she was unable to do with her mother. Lana felt that the attention of these people motivated her change.

Advantange of Case Studies:

a. **Can give an overall picture of a project's effect on one or more individuals and <u>may</u> shed insights on the program's impact.**

Disadvantage of Case Studies:

a. **Interpretations may be overly subjective.**

EWP

CASE STUDY OUTLINE

Give details and explanations of the items listed below as they apply to the student's background. Mark "no information" or "not applicable" for appropriate sections. We are interested in patterns of change shown by the student in any of these areas since his entrance in the program. For example, a student's criminal record may have improved since his contact with the program. We are not trying to show that the program is solely responsible for this improvement but is a contributing variable. You may attach additional pages to further elaborate on any items or provide supplementary information you feel is valuable.

I. GENERAL INFORMATION:

Name _____ Date of Birth _____

Place of Birth _____

Address _____

Name of Parents or Guardian (Father) _____

(Mother) _____

(Guardian) _____

Occupation of Parents (Father) _____

(Mother) _____

(Guardian) _____

Nationality of Parents (Ethnic code may be used)

(Father) _____

(Mother) _____

(Guardian) _____

II. TEST DATA:

Achievement } GPA may substitute _____

Aptitude } _____

Personality and Temperament _____

_____

_____

III. HEALTH:

Physical _____

Mental _____

_____

IV. SCHOOL HISTORY:

Scholarship Record/award(s)--(if no outstanding awards compare the student's Jr. High academic record, GPA, attendance, etc., to his present school record or most recent attendance).

_____

_____

_____

_____

_____

Types of Schools Attended--(explain student's activities within types of schools and reasons for changes; for example: Public Schools--attended 3 Jr. Highs because of disciplinary transfers, or parental ethnic transfer requests, etc.)

_____

_____

_____

_____

_____

_____

Changes from School to School--Why? (EX. truancy, military family, may be an extension of the above reasons) _____

_____

_____

V. HOME CONDITIONS:

Social and economic status (as it applies to the student i.e. supporting family, welfare recipient, etc)

_____

_____

_____

General Atmosphere of the Home _____

(If known, consider siblings, parent-child relationship, grandparent relationship or any other individual relationships with the student.)

Pupil's Attitude Toward His Home (If living on own why and is there still contact with home?) _____

VI. SOCIAL RELATIONS:

Companions and Friends (Gang involvement, a loner, etc.)_____

Relations with Teachers (May reflect student's attitude toward school.)

Out-of-School Activities _____

VII. INTERESTS:

Educational and Vocational Plans _____

Interest/Hobbies at This Time (Have interests changed since your contact with students? How?) _____

Curriculum in which enrolled (Example: EWP classes, ROP classes, regular day school, adult school, working towards what kind of a degree)

CLAYBURNE CITY SCHOOLS
EXEMPLARY WORK PROJECT

STUDENT EVALUATION - 1975/76 SCHOOL YEAR

Name of Interviewer _____ Location of Interview _____

Date _____ Your Grade _____

1. Your Name _____

2. Your Work Location (Employer) _____

3. How long have you been in the project? _____

4. Have you received what you expected from this project when you went into it?

Yes _____ No _____

5. Please describe how you feel about your job experience up to this time.

_____

_____

_____

6. Have you changed jobs since being on the project? Yes ____ No ____
If yes - why have you changed?

_____

_____

_____

7. School you attend now _____

8. Please describe how you feel about your school experience up to this time.

_____

_____

_____

9. In the blank provided at the beginning of each of the three statements below, place a number that best expresses how you feel about it. Use the following 1-5 scale:

5 - Fantastic!
4 - Great
3 - O.K.
2 - Bombed
1 - Ripoff

_____ A. How much have you enjoyed your present job.

_____ B. How would you rate your classes (English, math, etc.) - at the school you now attend.

_____ C. Rate your experiences in this project into your total life. (Is it one of the most important parts of the life you lead now?)

10. If you could change any part of this project what would it be?_____

_____

_____

11. What do you like best about it?_____

_____

_____

_____

12. Has the staff (counselors and teachers) been helpful to you?

Yes _____ No _____ Undecided _____

1975 - 76

CLAYBURNE CITY SCHOOLS
EXEMPLARY WORK PROJECT

STAFF SURVEY

(To be completed by all staff attached to the project)

Name of Interviewer _____ Date _____

Staff Members Name (optional) _____ Title _____

DIRECTIONS: The first year's evaluation is concerned with the implementation and the process of establishing the project; the program staff are to be held accountable for the process. Assist us by providing candid responses to the questions below. In the first eight questions please circle your response on the scale of 5 to 1. In the last two questions please express yourself in narrative form. THANK YOU.

Statements	Strongly Agree	Agree	Un-decided	Dis-agree	Strongly Disagree
1. The purposes of this project were clear to me at the start. . . .	5	4	3	2	1
2. The objectives of this project are not realistic within the time allowed.	5	4	3	2	1
3. The participants (students) are accepting the purposes of this project.	5	4	3	2	1
4. The student selection criteria have generally been appropriate. . .	5	4	3	2	1
5. We the staff, are working together as a group	5	4	3	2	1
6. My time is being well spent, compared to other assignments I have had in this school district . .	5	4	3	2	1
7. The program met my expectations and I feel it is providing something "unique" to these youngsters	5	4	3	2	1
8. Overall, I would say this project has been successfully implemented during the first year.	5	4	3	2	1

9. Please cite one or two specific reasons for your response in question (8); especially if you ranked at 5 or 1.

10. Please describe specifically any changes you would see as important to improve the functioning of the project; either in terms of services to students or general administrative items.

CLAYBURNE CITY SCHOOLS
EXEMPLARY WORK PROJECT

EMPLOYER EVALUATION 1975/76

Date _____ Your Name _____

Your Business Name _____

_____
Name of Interviewer

1. Names of EWP Student(s) in your employ at this time:

   a) _____

   b) _____

   c) _____

   d) _____

   (Use an additional form if more than above.)

2. Please circle letters in (1) which correspond to those students covered in this report.

3. How many EWP students have you had <u>in total</u> since you became involved with our program? _____

4. If you have had a turnover of students during the past months, please cite the reasons for student termination.

   a) _____

   b) _____

   c) _____

   d) _____

5. How were you contacted about employing our students?

   1. By phone 3. Notice from supervisors 5. Counselor Referrals

   2. Personal contact 4. Newspaper 6. Other

6. At this time what is your overall reaction regarding the present job performance of our student(s) (circle proper number on scale).

   5 4 3 2 1
   Positive Negative

7. On the same scale, please react to the job performance at the time the student(s) <u>first reported to you</u>:

   5 4 3 2 1
   Positive Negative

8. Do you feel inclined to want to continue cooperation in this program beyond this present school year (assuming subsidized salary is still possible)?

Yes _____ No _____ Undecided _____

9. Do you feel there is a possibility you might retain your "employee" beyond the termination of the subsidized funding?

Yes _____ No _____ Undecided _____ Not applicable _____

10. If the answer to question 9 is No, please give the reason.

Unsatisfactory EWP student performance _____

Students under age _____

Job slots will not be available _____

Insufficient funds of your own _____

Other reasons (please list)

_____ _____

_____ _____

11. Has your relationship with the Exemplary Work Project staff been satisfactory?

Yes _____ No _____ Undecided _____

12. What problems have you detected in the project that need attention?

Student pay checks late _____

Confusion with required paper work _____

Lack of communication with EWP staff _____

Student job attitudes _____

Student pre-job orientation _____

Student reliability _____

Other items (please list)

_____ _____

_____ _____

13. Comments (positive or negative)

_____

_____

_____

_____

1975 - 1976

CLAYBURNE CITY SCHOOLS
EXEMPLARY WORK PROJECT

Location of Interview

Parental Survey

Name of Interviewer

Date

1. Parent's Name

2. Your Student's Name

Highest Grade Your Student has Completed

3. His/Her Previous School's Name

4. Has he/she ever been expelled or exempted? Yes _____ No _____

5. When was the last time he/she attended "regular" school?

5/A Where does he/she attend school now

6. How long has he/she been in the exemplary work project?

7. Where is the present work station located?

9. Does your student appear to be satisfied with the program up to this time?

Yes _____ No _____ Undecided _____

To the parent: Please check the appropriate box in the eight questions below - then please answer the last two questions in your own words.

	STRONGLY AGREE	AGREE	DISAGREE	UNDECIDED OR DON'T KNOW
9. When my child was last in regular school he/she was enthusiastic about it at home.				
10. So far this year I have noticed a change for the better in the attitude of my child.				
11. Overall, in the exemplary work project the performance of my child appears satisfactory.				
12. I feel I know quite a bit about the goals of this project.				
13. I feel I have been fully informed by the project staff relative to my child's progress.				

STRONGLY AGREE	AGREE	DISAGREE	UNDECIDED OR DON'T KNOW

14. I feel there is a good degree of cooperation and communication between the parents, students, and staff.

15. So far, I have been able to establish a positive opinion of this project regarding its difference from "regular" schools.

16. It appears as if the concept will meet (or has met) the particular needs of my child.

17. In what particular ways do you think this project has affected your child? _____

_____

_____

_____

18. Do you have any suggestions for change or improvement in our project? _____

_____

_____

_____

CASE STUDY NO. 7: NORTHWEST CAREER HIGH SCHOOL

About 1970 the concept of career education was conceived (or as some people say, was revived from a beginning at a much earlier point in time). In any event the movement swept the country very rapidly and, while the concept was there, the basic definition and operational formats were left up to individual school districts or other educational agencies. Many different ideas were, and still are, tried throughout the United States. Two events occurred in the Clayburne Unified School District that put them into a position to develop a uniquely innovative concept in career education with strong vocational overtones.

The first of these events was the realization by the then deputy superintendent and assistant superintendent that a career education unit should be formed for district-wide development of the total program. This unit employed a director hired from outside the district and subsumed the existing vocational education activities under its purview.

The second event leading to the development of Northwest Career High School was the availability of a small school site. The site had previously been used for another purpose and had dwindled in student enrollment so that it was no longer economically or operationally wise to operate it. Thus the availability of a site plus the evolving career concepts and top management support led to a newly structured instructional arena.

In its effort to provide an alternative to the traditional senior high school experience, Clayburne's Northwest Career High School was opened in September, 1973, as an experimental project funded in large part by ESEA Title III funds. The school's career-oriented outreach program was directed at students who did not plan to continue directly on to college; with instruction organized around occupational training, on-the-job training, and placement. A great deal of importance was also attached to the development of "career concepts" through a combination of classroom instruction, intergroup relations, and personal counseling. At the same time, students complete the basic academic subjects required for a standard high school diploma. This allows them the option of entering a two-year community college, or even some four-year colleges, should their post high school career plans change.

Northwest School is located in northwest Clayburne, the city's predominantly Black and Mexican American area. Prior to 1973, it operated as a continuation high school with a student body that was drawn almost exclusively from the local minority population. The school's reputation was one of violent students and an embattled teaching staff. "Little, if any, learning was taking place," according to one district report, and "many who were close to the situation felt that a drastic change should be made in the school or it should be closed." The assistant superintendent for secondary schools, William Lander, summed up the district's frustration with Northwest by declaring that the continuation program "was failing both students and parents."

The Title III funds, for a three year period, permitted the backup for a complete changeover to the career concept. It allowed the employment of four additional staff members one of whom was the academic coordinator, one of whom was the occupational training coordinator, one of whom was the on-job-training coordinator, and finally one who specialized in career counseling. The Title III award mandated evaluation each year and a considerable degree of latitude in creative evaluation was allowed. This perhaps was because standardized testing was not considered the most important method of evaluation by the district. Instead a number of non-test indicators were emphasized, some of which are described here. As an aside, for those readers who may be involved with this type of project during their evaluation careers, the importance of standardized test results should not be ignored. At the end of the third year the district applied for an incentive (dissemination) grant and it was denied. In retrospect, it was undoubtedly the low profile accorded to testing that encouraged the state to make a negative decision. Historically, they have placed high emphasis on test scores and this posture continues. The evaluator seeking to impress funding officials should place high priority to test results as well as to their presentation in graphic display. The state has required forms that must be used, however these may be supplemented by the evaluator's own creations to highlight positive results. An example of how these kinds of data may be displayed was shown in case study number 4.

Standardized Achievement Tests such as the CTBS (Comprehensive Test of Basic Skills) are generally not used in purely vocational program evaluation. The criterion-referenced test; often developed especially for the project, is usually more appropriate. These tests would be designed to measure the student on specific levels of proficiency as demanded by the occupation in question. To repeat, the evaluator who is operating with federal/state funds may wish to be more emphatic in his use of nationally normed instruments. Adequate descriptions and methods of use may be found in any recognized general purpose evaluation text.

Technique 9: Case Study (2)

The original needs assessment for the Northwest proposal was augmented by information supplied by Dr. Lamar Gerry, who was one of the district's full-time evaluators and a specialist in the design and administration of vocational education programs. Dr. Gerry surveyed a five-school sample of over 200 secondary students, as well as reviewing pertinent school records, to profile the expected population of Northwest in its first year as a career center. Because the approach was to be significantly different from vocational programs elsewhere in Clayburne, and, indeed in its state, the closest thing to a prototype found by the proposal writers was the example of Skyline School in Dallas, Texas. For all those involved then, Northwest was to be an introductory experience and very much an experiment.

Profile of, Who is the Evaluator?

Dr. Lamar Gerry had been with the Clayburne district for some ten years as a teacher, vocational education specialist, and now program evaluator. Gerry's strength was in vocational or career education rather than evaluation *per se*; in fact, it was his expertise in the former that led to his appointment to the district's evaluation unit, primarily in charge of the various occupation-oriented programs operating in the city's secondary schools.

This background had strongly influenced Dr. Gerry's approach to evaluation. Most apparent is his definition of the role he should play in a program, which closely follows state and district guidelines for the position, Gerry saw himself as a neutral, outside source of information on the program objectives -- first in the shaping of the objectives, and secondly on the progress the program is making towards their accomplishment. The means he chose to measure those program objectives also reflect Dr. Gerry's training. His conception of career education, and his prior experience with it, predisposed him to a reliance on various qualitative, site level, and non-standardized measures of effectiveness; he felt that the qualities that Northwest was trying to develop simply could not be captured by scores on academic achievement tests. Reinforcing this disposition was Dr. Gerry's lack of a strong background in quantitative data analysis for evaluation. He stated that the skills he did possess in this area had been developed without professional training in evaluation techniques. At the same time, Gerry places the CTBS testing schedule at the top of his list of priorities because it is required by law, and thus the program evaluator's obligation.

Dr. Gerry's background was also felt outside the evaluation. His expertise in vocational education gave him a unique role in the program design and implementation phases; and his personal commitment to the career education concept helped establish the strong communication links he enjoyed with the principal(s) and program staff.

This combination of skills and experience served Dr. Gerry particularly well in the evaluation. He was able to strike a balance between the professional limitations on his role and the great personal interest he had in the program's success. In concentrating on providing the kind of information which was immediately useful for program improvement, Dr. Gerry contributed to the solidification at Northwest and its later adoption by the Clayburne district. Had his emphasis been placed on what he cited as the top priority -- CTBS scores -- the program might have been received differently in the State capital. But it would not have been the same program.

<u>On-going communication</u>.

Dr. Gerry and both Northwest's principals (there was a change midway in the second year) -- especially Mrs. Warner (the second principal) -- quickly instituted a series of formal and informal procedures to assure that the evaluation's information got to the site decision-maker as soon as possible. Gerry kept the principals acquainted with the instruments he was using; he met with Mr. Alcott (the first principal) and Warner whenever a survey or test had been completed; his observation visits to the program usually began or ended with a discussion in the principal's office; and, in the case of Mrs. Warner, the mid-year and year-end reports were reviewed by the evaluator and principal together before being finalized. For the kinds of decision being made there, this rapid, constant provision of evaluative information was vital. That the communication channels were systematized so early in the life of the program can probably be attributed to a congruent assessment of information needs by the evaluator and the program director(s), and (in no small part) to the personal compatibility of Dr. Gerry with Northwest's two principals.

The communication between the evaluator and state or district authorities was less frequent and more formalized. Dr. Gerry and Mr. Isley, the State Coordinator, met several times a year to discuss the project, but written communication -- memos from Mr. Isley, the interim and final reports from Dr. Gerry -- were more common. The same pattern held with the flow of information to the district officer. Gerry met informally with personnel in the Secondary Schools and the Vocational Education divisions, but their main link was the written reports at mid-year and year's end. For the decisions about the project that were made by these two levels of school governance, on-going communication as such seemed to be much less important than the different kinds of information that each agency sought.

The majority of the preceeding description is excerpted from a larger case study done on the project. Technically the proper way to do a case study is to get viewpoints from at least two vantage points and then consolidate and synthesize the results into a composite whole. In this case the steps were as follows:

- Identical questionnaires given to the evaluator and the two school principals. None of them saw how the others answered.
- After an analysis of the questionnaires, the third party researcher interviewed all respondents.
- A series of further in-depth interviews were conducted with the evaluator.
- A final document (case study) was prepared and submitted to evaluator and principals for approval and annotation.
- A final closing interview was held, with all parties present, in in order to reach consensus on the validity of the case study.

Technique 10: Process Evaluation

Process evaluation is that technique whereby information is fed to the project decision makers during the course of operation so that directional changes may be made if necessary. It was illustrated in the description of Northwest Career High School how this was accomplished by the evaluator. This technique is most effective when the personality of the evaluator lends itself to ease of communication with the project director. The evaluator, above all, must not be considered as a threat; he should be viewed as a functioning member of the total instructional process. It is up to the evaluator to develop technical skills and human relations skills that will make him truly effective as a "process evaluator."

Advantage of Process Evaluation:

a. The principal advantage of process evaluation is to feed back to the project director suggestions for program improvement during the course of operation so as to improve instruction while the intervention technique is actually taking place.

Disadvantage of Process Evaluation:

a. The organizational structure or the personalities of the evaluator and/or project director may preclude meaningful rapport and utilization of "in-progress" results to help students.

Evaluation Forms

Some of the project-developed forms for use in eliciting responses from major project participants are on the following pages. These were used for primary participants; students and faculty, and for parents as secondary participants; one record keeping form is also displayed.

Interviewer_____ Date_____

STUDENT INTERVIEW

Name_____ Age_____

Grade Level_____ Street Address_____

City_____

1. What courses are you enrolled in this (include occupational cluster to which assigned, as well as any on-job training)

)Quarter
)Semester

(Please indicate quarter or semester by crossing out inappropriate term.)

_____(period 1)

_____(period 2)

_____(period 3)

_____(period 4)

_____(period 5)

_____(cluster)

_____(OJT)

2. What plans have you made for a job after you finish school?

3. Who has helped you the most, either here at school or outside of school, in planning for a job or for planning an educational training program?

Read to the student: "The following information is needed to aid in establishing and maintaining quality career education programs with equal opportunity for all groups."

4. Which of the following do you consider yourself to be?

____ American Indian

____ Black

____ Mexican American

____ Oriental

____ Puerto Rican

____ Spanish American

____ White

____ Other (specify)_____

_____

5. What do you like best about your present school situation?
   Probe: Do you get along OK with your classmates?

6. What do you dislike most about your present school situation?
   Probe: Do any of the students give you a hard time?

7. Overall, how do you feel about school this year?
   Probe: Is it any better or any worse than last year?

8. Have you made any close friends at this school?
   Probe: Who is your best friend here?

9. What do you wish was different about this school?

10. (For transported students only) What do you think about riding the bus

CLAYBURNE CITY SCHOOLS
NORTHWEST CAREER HIGH SCHOOL

Faculty Evaluation Scale On Present Status Of School

DATE _____

Did you teach at Northwest last year? Yes ___ No ___ (Answer is optional)

(Please do not sign your name)

Directions: Read each statement carefully and decide how you feel about it. You will agree with some statements and disagree with others. You are offered five possible answers to each statement. The "undecided" answer should be circled only when you have no opinion. Circle one number following each statement. Please answer all statements, and record your feelings as of this date.

Statements:	Strongly Agree	Agree	Un-decided	Dis-agree	Strongly Disagree
1. The purposes of this school are clearer to me now than three months ago.	5	4	3	2	1
2. The objectives of this school are not realistic within the time allowed.	5	4	3	2	1
3. The faculty are accepting the purposes of this school	5	4	3	2	1
4. I am learning more about career education as the year progresses.	5	4	3	2	1
5. We are working together as a group	5	4	3	2	1
6. I really feel a part of this group now	5	4	3	2	1
7. The program is meeting my expectations.	5	4	3	2	1
8. Relative to my teaching experiences last year, this is more rewarding	5	4	3	2	1

9. Please list below any particularly good points or bad points of the school as you perceived them.

_____

_____

_____

10. Please list below any specific ideas you have for school improvement during the balance of the year. _____

_____

CLAYBURNE CITY SCHOOLS
NORTHWEST CAREER HIGH SCHOOL

Parental Survey

Circle One: Date_____

Pre Post

Your Name_____

Your Student's Name_____

His/Her Previous School's Name_____

DIRECTIONS:

Below are listed eight statements regarding your knowledge of this school as well as your child's reaction toward it. Opposite each statement you should place a check mark to indicate your feeling or your opinion of it. Note that the possible choices are: STRONGLY AGREE, AGREE, DISAGREE, OR UNDECIDED. After you have completed the first eight questions, we ask that you respond to questions 9 and 10 in your own words. Your comments will help us to improve the school in line with the needs of your child. THANK YOU FOR YOUR HELP.

	STRONGLY AGREE	AGREE	DISAGREE	UNDECIDED
1. When my child was in school last year, he/she was enthusiastic about it at home.				
2. So far this year I have noticed a change for the better in the "school attitude" of my child.				
3. So far this year I have not noticed any change in my child's attitude toward school.				
4. I feel I know quite a bit about the goals of the Clayburne Career High School.				
5. I feel I have been fully informed by the school staff relative to my child's progress.				
6. I feel there is a good degree of cooperation and communication between the parents.				
7. So far, I have been able to establish an opinion of this school regarding its' difference from other schools.				
8. It appears as if this school will meet (or met) the particular needs of my child.				

9. In what particular ways do you think this school has affected your child?_____

_____

10. Do you have any suggestions for change or improvement in the school?_____

NORTHWEST CAREER HIGH SCHOOL

COMPARISON OF MARK POINT AVERAGES[1)]
STUDENT DATA COLLECTION ROSTER

Date_____ Data Collected by_____

STUDENT NAME	PRESENT OCCUPATIONAL CLUSTER	PRESENT GRADE	SEX	MARK POINT AVERAGE		SCHOOL ATTENDED IN JUNE 1974		REMARKS
				6/74	2/76	(NW)	(OTHER)	
e.g. Jones, John	Construction	12	M	2.8	3.1	yes		
Smith, Jane	Urban Agric.	12	F	2.4	3.4		Hoover	
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
13.								
14.								
15.								

1) All students on this form must have been enrolled at Northwest no later than September 1974 - but may have been enrolled prior to then.

STUDY QUESTIONS PART II

a) Develop a questionnaire on any evaluation subject, mail to 30 homogeneous people, and analyze the results.

b) Develop a structured interview questionnaire. Use it to interview six people in a given category of vocational training (or delivery system), and write a two page descriptive report.

c) Analyze results of recent research and write a two page paper arguing either for or against the improvement of basic skills (reading and mathematics) through the use of vocational or career education.

d) Develop your own follow-up questionnaire, mail to 30 ex-students and analyze results.

PART III

EVALUATION ISSUES

1. Evaluation Design & Decision Making

Evaluators should have considerable input into the original design of a project which will ultimately require his/her services in gathering data and preparing interim and final evaluation reports. Within a local school district supporting an autonomous and adequately staffed evaluation department, the degree of service will naturally vary with the individual evaluator involved. The very worst that can happen (and all to often, does happen) is that the assigned evaluator is never consulted on the original project construction, is brought into the picture after the fact, and is delegated responsibility for evaluation at some point after the project funding has occurred.

The next best thing is that some evaluator (not necessarily the one ultimately assigned to the project) is consulted during the early project writing stages, and is at least requested to examine the objectives and be sure they are "crisp enough" for measurement in the future. The evaluator, however, should caution himself not to be too hasty in making judgments on the efficacy or worth of the objectives; his job is basically to see if they are capable of quantifiable measurement. The best that can happen within time constraints and interests of the evaluator is that he be intimately involved in all aspects of the project application development. Projects directed to federal and state funding agencies are often written by relatively inexperienced writers who have no real knowledge of the problems to be addressed by the application. Therefore, the evaluator, if he or she is experienced, can be of immeasurable help during these early stages.

People can deal with problems more effectively if they can anticipate the nature of those problems. For the educational evaluator it is imperative to point out that most educational evaluations will be carried out in a thoroughly practical milieu in which the results may constitute playing cards that people will be dealing with from potentially political decks.

Evaluators tend over time to improve the quality of their data gathering and report preparation. Educational evaluators should feel fulfilled if, in their opinion, they have been able to enhance the quality of educational endeavors to which they direct their attention. Many evaluators initially assume that the educational world is out there, feverishly awaiting the results of their studies. Too often a surprise results, and it becomes apparent that evaluation, especially that which is required by extramural funding agencies, is all too often a rote process, and the results count for very little in the ultimate decision-making procedures.

The evaluator can have a significant effect on local process decision making if he has a personality that meshes with that of the project director and if his ongoing data-gathering efforts are used by the district for program improvement. At the state level, however, it is doubtful if his

efforts may ever amount to much more than a preparation of the standard forms that are required by the various funding sources. These forms usually bear very heavily on the use of pre-post standardized test results and all too often do not take cognizance of the non-test indicators that can so often assist the director in establishing a feel for "the real pulse of the operation." States also very often make funding decisions using data from sources other than what is provided by local program evaluators.

2. Preparing a Needs Assessment

Presumably evaluations are conducted on projects that are designed to cope with an educational need, or at least a need as perceived by administrators of an educational agency. Funding agencies usually require a fairly formal needs assessment to be performed during the initial stages of preparing a proposal for outside monies. Even if a school district is developing its own inhouse vocational program a good needs assessment is desirable. The needs assessment can be developed in a number of ways, but the essential elements are to state the existing condition and indicate how the project will take students to the desired condition. For example:

EXISTING CONDITION (what is)	DESIRED CONDITION	DISCREPANCY	ANALYSIS OF DISCREPANCY
Approximately 10% of high school students in Bayview public schools are potential dropouts and also have expressed interest in an alternative type of school. The majority of these students are not enrolled in a vocational class. On the average, a random sample of these students have reading scores below the median.	At least 300 of the students identified as potential dropouts, non vocational enrollees, and, low academic performers be enrolled in an alternative school to be known as the northwest career education high school.	No such alternative school presently exists in this school district.	An unused site presently exists that would be adequate for such a school The district lacks adequate financial resources to staff such a school with the specialized personnel that are required. Additional support funds would enable the district to implement this new concept.

Information to validate the existing condition may be gathered by the use of questionnaires sent to parents, staff members, employers, or students.

CENTRAL CITY SCHOOLS

SCHOOL IMPROVEMENT PROGRAM
HOLMES HIGH SCHOOL
NEEDS ASSESSMENT PROFILE

Dear Parent:

We need your help. Our school is continually assessing needs in order to develop appropriate educational programs for children. We want to know your views in regard to their needs. We invite you to take part in the planning by completing this brief questionnaire. Please return it to the school as soon as possible. Thank you.

My child is in grades: ____ 10, ____ 11, ____ 12 (Please check one).

DIRECTIONS: Below are listed 20 items, ten of them in academic areas and ten of them in non-academic areas. Please rank each one on a scale of 5 - 1 (high to low) depending on how you perceive its importance to the instruction of children at our school. Please circle opposite each item the number that best describes your feelings.

ACADEMIC	HIGH/LOW	NON ACADEMIC	HIGH/LOW
1. Reading	5 4 3 2 1	1. Development of Staff	5 4 3 2 1
2. Oral Expression	5 4 3 2 1	2. Student Self-Concept	5 4 3 2 1
3. Written Expression	5 4 3 2 1	3. Physical Education	5 4 3 2 1
4. Mathematics	5 4 3 2 1	4. Health Education	5 4 3 2 1
5. Science	5 4 3 2 1	5. Counseling	5 4 3 2 1
6. Vocational Education	5 4 3 2 1	6. Parent Education	5 4 3 2 1
7. Social Studies	5 4 3 2 1	7. Teacher Conferences	5 4 3 2 1
8. Bilingual Studies	5 4 3 2 1	8. Career Education	5 4 3 2 1
9. Art and Music	5 4 3 2 1	9. Consumer Economics	5 4 3 2 1
10. Other Enrichment	5 4 3 2 1	10. Students with Special Needs	5 4 3 2 1

Are there any other areas in which you feel our school needs to place special attention?

_____

_____

_____

OTHER COMMENTS: _____

_____

PLEASE RETURN PROMPTLY

Thank you.

This is one way of gathering information, but not the only one. The principles of questionnaire construction discussed in the section on follow-up should be adhered to with special attention paid to brevity and ease of tabulation of data received. One example of a short parental needs assessment, from which excellent results have been achieved, is shown.

Parental, staff, employer, and student input is very important. However, this should be supplemented by information gathered by unobtrusive means. For example school records of attendance, grade point averages, test scores, and referrals to counselors should be used whenever possible. In larger school districts much of this information is contained in the computer data bank and may be obtained without resorting to undue consumption of peoples' time and attendant possibilities for biased responses.

3. Is The Measurement Instrument Appropriate?

Throughout the manual we have referred to various measuring instruments, whether they be standardized tests, criterion tests, structured interview forms, survey forms, or other self-developed devices. Each one has its place and is usually tailored for a specific vocational program. Ot it may be modified from some other instrument that has been located elsewhere. If modification is the technique, be sure to watch the copyright laws and assure yourself that you are making no violations. Often times a letter to the publisher or the developer of another test will provide the necessary clearance to "borrow" a few items.

The appropriateness of instruments for use in vocational evaluations is especially difficult to determine. Obviously they must be related to the subject matter being taught (or the attitudinal development being sought). The instruments should have other characteristics too, such as ease of administration, scoring, and interpretation. Teachers who use any evaluation instruments, whether commercial or self-developed, should have an opportunity to rate them after having had an opportunity to try them in the classroom. A useful scale is shown. This scale, in itself, was a project-developed instrument, which borrowed on experiences of both teachers and evaluators.

4. Abstracting the Report for Reader Utility

Evaluation reports often tend to become quite long which may discourage busy administrators from reading them in toto. It therefore is a good idea to condense the essential elements of the report on one or two pages at the very front of the document. This permits the decision makers or other interested persons to receive immediate information on the results of the evaluation as well as the main thrusts of the project while it was in progress. Unless an extra curricular funding agency requires a certain format, the evaluator may design his own abstract page(s). In any case, no matter what the outside source requires, it is usually wise for the LEA to design its own document for use within its family of administrators and decision makers. Two possible abstract designs are shown; one confined to a single page and one somewhat longer.

CENTRAL CITY SCHOOLS

TEACHER RATING SCALE - STUDENT TESTS

NAME OF TEST: _____ DATE RATED: _____

TYPE OF STUDENTS FOR WHICH IT IS APPROPRIATE? _____

GRADE LEVEL OF STUDENT FOR WHICH IT IS APPROPRIATE? _____

ADMINISTERED: INDIVIDUAL _____ GROUP _____ EITHER _____

TIME REQUIRED FOR ADMINISTRATION? _____

NAME OF TEACHER COMPLETING THIS FORM: _____

DIMENSIONS	RATING HIGH 5	4	3	2	LOW 1	RELEVANT QUESTION
1. Validity	5	4	3	2	1	Does the test appear to measure your specific educational objectives?
2. Validity	5	4	3	2	1	Does the test appear to predict the student's performance on related tasks?
3. Understandibility	5	4	3	2	1	Is the comprehension level correct for the age and educational level to which the test is directed?
4. Content Usefulness	5	4	3	2	1	Is the test content closely related to your curriculum?
5. Ease of Administration	5	4	3	2	1	Is the test easily and conveniently administered?
6. Scoring	5	4	3	2	1	Can the test be easily and reliably scored by hand?
7. Interpretation	5	4	3	2	1	Can the scores be easily interpreted and decisions be made from the results?
8. Reliability	5	4	3	2	1	Does the test measure consistently from one time to another?

Comments (particularly any major strengths or weaknesses): _____

CENTRAL UNIFIED SCHOOL DISTRICT

EVALUATION REPORT ABSTRACT*

TITLE OF PROJECT:

Business Careers Training for Disadvantaged Students

DATE: March 12, 1978

FUNDING: ESEA and District in kind

ESD Report Number: 188

DESCRIPTION OF PROJECT: Business Careers training was designed to impart entry-level job skills to 300 eleventh grade students from the Linda Vista area of Central City. It was operated in two high schools during the 1977-78 school year and utilized the individualized learning packet approach with a heavy emphasis on peer tutoring. The 183 boys and 117 girls who entered the program in September 1977 were especially selected through administration of the Career Planning Inventory by each schools' counseling staff.

MAJOR PROGRAM OBJECTIVES: As a result of successfully participating in the business program each student will be provided with an entry-level skill which will enable him to type 60 words per minute and file 120 letters per hour. Seventy five percent of those students who enter the program will successfully acquire this skill as verified by the Occupational Skills Inventory administered during the fourth quarter of the year. Fifty percent of those students requesting help will be placed in summer jobs related to their classroom training.

EVALUATION DESIGN: Students were pre-post tested with the Occupational Skills Inventory over the period October 1976 to June 1977. Opinionnaires were administered to students, teachers, site administrators, and local employers. Finally, an assessment and validation of the curriculum was performed by the industry-based Central City Businessmens' Occupational Advisory Committee.

EVALUATION FINDINGS: It was found that 82% of those students who started the program completed it by the end of the school year. Of those who completed the work there was an entry-level skill certification of 65%. The most easily acquired skill appeared to be the filing of letters, while the ability to type 60 words per minute appeared to be correlated with the level of disadvantagement and was attained most easily by students who scored at the 76th percentile or higher in reading tests.

RECOMMENDATIONS: On the basis of the evaluation findings it is recommended that these actions should be taken:

1. Involve higher student selectivity in the initial counseling.
2. Consider the possibility of using another standardized test for pre-post evaluation.
3. Refine the techniques of identifying disadvantaged students.

This page is to be inserted immediately behind the Table of Contents in all Evaluation Services Department reports.

SUMMARY OF FINDINGS AND RECOMMENDATIONS

Conclusions

Recommendations

Project Objectives

Profile of the Project Participants

Profile of the Project Locale

EXEMPLARY WORK PROGRAM

1975-76

CONCLUSIONS

The following conclusions have been reached as a result of the Exemplary Work Program review and analysis:

1. The data suggest that project participants, who had prior records with the Probation Department, had a recidivism rate about 10% lower than what was anticipated; although the time period has "qualifications".

2. The data show that there were no arrests among project participants who were valid "non-priors." Calculated probabilities indicated 12% could have reasonably been expected to be arrested.

3. All indications are that paid employment is helpful in juvenile crime reduction and that a cause/effect relationship does exist.

4. Enthusiasm for school, while still marginal, was enhanced in many cases by project participation.

5. Records indicate that about two thirds of the project participants had previously had contact with the criminal justice system, therefore the student selection was usually appropriate.

6. The student-participants benefit heavily from intensive career and "family life" counseling. The correct counseling technique is a key to program success, but further research on techniques is needed.

7. Strong community support was exhibited and could be employed to great advantage if a similar project is implemented in the future.

8. The length of program operation was clearly too short to attain the depth of desirable outcomes that had been anticipated.

9. The total cost of the program was translated to approximately $1,750 per student participant.

10. A sound evaluation methodology was developed and could be transportable to future projects of a similar nature.

11. There were gaps in communication from the state/federal level, as well as internal staffing problems that acted to lessen program success.

12. There appears to be a duplication and overlapping of efforts in federally funded projects of this type in the same geographical area.

RECOMMENDATIONS

On the basis of the conclusions reached in the Exemplary Work Program review and analysis, it is recommended that these actions should be taken:

1. Dialogue should be initiated with appropriate funding sources to provide backing for a similar program to be operated for a minimum of three years, starting in 1977.

2. The evaluation methodology developed during 1975-76 be re ined and updated for use in any subsequent funding years.

3. The lines of communication and decision making points at state/federal levels be clearly established before starting another program.

4. Future program administration at the local level must be closely accountable for use of resources, and delivery of high quality career counseling and job training.

5. The educational segment of such a program should be emphasized more heavily and student progress monitored more closely.

6. Care should be taken to avoid duplications and overlaps with agencies performing similar functions, or at least to work closely with, and communicate with, those agencies that appear to offer related services.

7. Community advisory committees be used heavily in any future program in order to avoid duplications, provide liaison, and help create suitable job slots--especially in the private sector.

8. In future programs the record keeping system, covering all facets of the operation, must be accurate and systematically available to the evaluators in order to properly measure progress towards predetermined objectives.

PROJECT OBJECTIVES

The primary objective of the program was to take 600 teenage juveniles, residing in high crime rate areas of Bayview, and put them to work on paid jobs.

A secondary objective was to provide the counseling and other support services necessary for the conduct of the program.

A third objective was to attempt to prove a cause/effect relationship between youth unemployment and juvenile crime.

Specifically these objectives were translated into three major activities on which the evaluators were to collect data:

1. Reduce by 12.5% the anticipated 40% recidivism rate of project participants with known prior Probation Department records.

2. Reduce by 12.5% the anticipated 12% annual arrest rate of teenage juveniles, living in program service areas, who are known "non-priors."

3. Document the processes associated with program operation.

PROFILE OF THE PROJECT PARTICIPANTS

The student participants consisted of approximately 550 individuals during fullscale program operation.

1. The ethnic breakdown was approximately 36% white, 36% black, 13% Spanish surname, and 15% other minority or unable to identify.

2. The age breakdown was approximately 12% of 15 year olds, 27% of 16 year olds, 40% of 17 year olds, and 21% of 18 year olds.

3. The sex breakdown was 61% males and 39% females.

The staff participants numbered between 27 and 30 people during the project operation. The typical staffing pattern was:

Project Director	-1
Administrative Aide	-1
Career Counselors	-4
Head Instructor	-1
Hourly Instructors	-3
Teacher Aides	-2
Community Aides	-2
Secretary	-1
Payroll Clerk	-1
Time Card Clerk	-2 (students)
Clerical Pool	-8 (students)
Clerk - Bilingual	-1

5. Incentives for Evaluation

Incentives for evaluation should ideally come directly from the agency operating the vocational program. These incentives should revolve around the process aspects which will help the project staff improve the program as it unfolds, as well as summary data which will tell how well the program did (based on its original objectives), and will provide a base for continuance or discontinuance. This posture assumes that the local educational agency considers evaluation of its vocational programs as an integral part of the instructional process. In order to assume this stance, the LEA must be willing to commit a share of its own financial and personnel resources to this ongoing task. In reality, whether due to scarce financial backing or general lack of perception of value, this "non-motivated" evaluation is seldom accomplished. In the era in which we live, it is probably understandable that this situation should be so. Teachers and the general instructional program compete for funds, and it is difficult to ascribe the immediate value of program evaluation.

What, then, are the major factors that dictate vocational education evaluation today at the local school district level? A desire to measure results and provide program improvement may be one of them, but it is not paramount. The primary impetus is from the direction of the categorical funding source. The ESEA, Title IV-C requirements, as an example, require mid-year and year-end evaluations along fairly structured lines on specific forms provided by the agency. As mentioned before, these forms rely heavily on the use of standardized test results. While the report format is very much structured, the evaluator is not precluded from creating his own "addendum" which may offer the opportunity for a bit more insightful description of program results.

Another source of evaluation requirement, other than the state or other categorical funding agency, could be court orders involving desegregation, federal legislation, and other such situations. The central issue is: does the local agency conduct evaluations of its own programs simply for the sake of making them better? Or, does the agency merely conduct evaluations as a compliance for outside funding with local program improvement as a possible "spin-off"? Too often the latter situation persists.

6. Politics of Evaluation

Three critical decision points exist in most vocational education evaluation. Since the state is the distribution agent for the federal funds (either VEA or Title IV-C), there is clearly a focal point here which may be divided between formative and summative issues. The state has certain reports it requires, and it also conducts one on-site visitation each year during the financial support of a project. The state contact person and the evaluator may agree on the points that are needed for program improvement, except it must be kept in mind that the state will always attach great importance to the Comprehensive Tests of Basic Skills (or other standardized measures). During the first two and a half years of project funding, the decision-making process is most likely a dual one between the evaluator and the state representative. At the end of the third year, on the other hand, the state decision-making role shifts completely to a review committee. The review committee makes but one decision: to extend state support for project dissemination to other schools or to terminate the funds entirely. It is at this point that the politics of evaluation come into play.

The next hierarchical level for political decision making is within the district structure itself. If the district employs a competent and experienced vocational education evaluator, his expertise can virtually preclude the intromission of other district officials in the formulation of recommendations. The competent evaluator should be given full authority and responsibility for program recommendations. The wise evaluator, however, will always realize his position is just that--one of an evaluator. While he may have full authority for making recommendations, it is ultimately the project director (who may be a school principal) who must make the final decisions and implementations. Like the state process, however, a final decision to keep, eliminate, or modify a program in the district is made at a high level--the secondary schools division--and in the case of outside funded programs, only at the end of three years. But, unlike the state, the district also takes into account the numerous program facets that are not reflected in test scores alone, e.g., student attendance and attitude, curriculum development, impact on the community,

and, so on. The evaluators' reports can provide the information necessary for a study and continuous documentation of program progress to support a district decision to continue it after outside funding ceases. It is doubtful if many programs will survive after the three-year outside funding if reliance is placed only on the structured state reporting forms. It is at this point that the evaluators' creative skills can bear fruit. He can create a descriptive report of his own design that will supplement the state reports and will assist the district in its decision for the future. Not only a report, but the personality of the evaluator can be of paramount importance in the local politics of program operation. His technical evaluation skills are important to be sure, but probably far more important at the district level is the rapport he/she has been able to generate with the staff. This means the teaching staff with whom he deals, the project director, and members of the secondary schools staff at the decision-making level. Results are not guaranteed by a pleasing personality, of course, for the final decisions could ultimately be based on many other factors. The evaluator should play a role that closely follows state and district guidelines for the position, and he should be a neutral, outside source of information on program objectives--first, in the shaping of the objectives and secondly, in measuring progress towards them. His personality and staff realtionships throughout this process can have important implications in the politics at the local level.

The third decision-making point--after the state and the district-level staff--is the school principal or project director. For internal purposes this is the one terminus for process decision making. The personal characteristics of both the principal and the evaluator come into play heavily at this point. If the evaluator had demonstrated competence and, at the same time, is able to project a low key but cooperative profile, he probably can emerge as a key person in program operation and changes in emphasis. In the hierarchy of the politics of evaluation, the program evaluators' influence can probably be most deeply felt in his day-to-day relationships with the project operating staff. The evaluator would be well advised to content himself with successes at this end.

7. Finding Your Own Role as an Evaluator

The comments which follow presuppose that the evaluator is an employee of a public organization, such as a local school district. The evaluator employed as a private consultant will need to find his role in a completely different manner.

Typically a vocational program, especially one with "outside funding," will have a project director. If the project occurs within a single school, or actually consists of the entire school itself, the project director may often be the site principal. Projects that are broader in scope, cutting through several schools, usually have an administrator from the central district office designated as the director. In either case one or more inherent problems of evaluator/director relations is almost sure to arise over a period of time. As has been pointed out several times in this manual, the personality of the evaluator and the degree of his rapport is certain to come into play in the resolution of conflicts or misunderstandings. Some of the situations that may occur for the evaluator are:

Gaining Confidence and Credibility

A number of questions fall into this general rubric. Initially the activities and the motives of the evaluator may be very suspect; albeit he may well be ostensibly greeted with open arms and guarded enthusiasm when he arrives on the scene to discuss an evaluation plan with the director. Evaluation intrinsically seems to have a threatening effect on project personnel, although the nature of the threat may vary between two types of employees; project directors (principals) and teachers.

The principal has noted a budget line item in his project proposal or plan that indicates some dollars assigned for evaluation, but unless he or she has had previous experience with special projects there is probably little cognizance of what in entailed. On the other hand, this can be an advantage to the evaluator. If the director is inexperienced, he may be likely to place complete confidence in the evaluator and give him carte-blanche to design the overall scheme. In this situation the experienced and skillful evaluator is able to transcend his job description and provide significant process-input to help improve programs.

The good evaluator can obtain the confidence and respect of most project directors although it may take time. It is advisable to move slowly at first until such time as the director has an opportunity to recognize the skills possessed by the evaluator and the services he can perform. The evaluator, to gain complete confidence, must be in possession of the technical skills necessary to do the job. If he does not know an answer to a question, he should be quick to say so, but he should be equally quick in saying "I will get you the answer to that question tomorrow." Project directors often need information in a hurry in order to make process decisions.

Gaining the confidence of project teachers is probably more difficult than for the director. Teachers see any evaluation as a threat and in the majority of cases they do not understand the need for it. They rarely are aware of the outside funding that makes evaluation a requirement. Also the amount of record keeping that may be required of them on special projects may not be very popular.

Teachers are usually enthusiastic about the money they receive from a project for new equipment, classroom teacher aides, or other refinements. They are often (but not always) less enthusiastic about the need for accountability. Both from this point of view and the point of view of classroom instruction being disrupted, it is probably best that the evaluator collect as much data as possible through unobtrusive means. In this regard the computer with its large student data bank, can be of great assistance in districts large enough to have this capability.

Dollars Allocated for Evaluation

Normally a project will have somewhere between 5% and 8% of the budget allocated for evaluation. The first several months of project evaluation rarely sees a questioning of this budget item on the part of the director, especially if the evaluator is competent and appears at the project site frequently enough to maintain what is considered good visibility.

It is far from uncommon, however, to have the director or other project personnel begin to question this budget item as time goes on. After all, "the project appears to be going well and evaluation is not really necessary anyway; why don't we just get part of this money transferred to another category so we can buy supplies with it or pay a classroom aide? Besides that, our evaluator only comes around two or three times a month and his daily rate of pay seems to be terribly high, based on the budget allocations." The fact often overlooked here, of course, is the tremendous amount of behind the scenes work performed by the evaluator that the director never sees. This includes such things as development of data collecting instruments, designing the evaluation, collecting and processing data, and preparation of mid-year and final evaluation reports.

The "we want to usurp the evaluation dollar" syndrome will ultimately be encountered by an evaluator employed by a school district -- if he or she stays in the business long enough. The problem is that the evaluator is usually not in a decision making role unless he has assumed it by fiat, and thus cannot arbitrate these disputes, they usually must be resolved at a higher level in the chain of authority to the schools. The obvious way to minimize such events occuring is for the evaluator to do his job so effectively there is no real question as to the services rendered and their relationship to the improvement of the program. Evaluation and instruction are intertwined. One of our jobs in this emerging profession of vocational program evaluation is to set high standards for ourselves and render services which will display the interplay of instruction and evaluation.

The Disinterested Project Director

The project director usually has other things to do, especially if he is running a school, and he may be totally disinterested in the evaluation of the particular project assigned to him. This can work in several ways for the evaluator, although in any case his job becomes much more difficult. Since all pertinent administrative directions, state reporting forms, time lines, and other key information is usually sent to the director, it is incumbent on him to keep the evaluator informed. If he fails to do this, then the evaluator must be alert to these things in one way or another and must usually end up extrapolating his real role into one of quasi-administration and "picking up the pieces" someone else should be putting together. Sometimes it may be necessary for the evaluator to even take it upon himself to rewrite proposals for continuation of funding, simply because the director is disinterested or incompetent to do it himself. This goes beyond the evaluator's "normal" role, but again, each person's personality comes into the picture here too. The conscientious evaluator who is interested in or believes in the program will not mind going the "extra mile" to see it succeed. In other cases the evaluator may see it as detracting from his professional role and will let the project sink. The writer would opt for "going the extra mile" when necessary, but this posture has often led him to disputes with colleagues of a different mind.

The Interested Project Director

The first three examples of relationship-situations depicted somewhat negative viewpoints. We should hasten to point out that there are very often extremely positive relationships too. Some project directors are interested in their special programs and want them to succeed -- either to help youngsters, or to help further their own careers in the

system-- or possibly both. In either case, this can be the ideal setting for the evaluator to have an impact and also to provide a setting where he can bring his own imagination into play for a truly creative evaluation. If a project is funded through state or federal sources, it more than likely will have a rigidly structured set of forms to be filled out at the end of the year. But the evaluator can add processes/product activities over and above the minimum requirements and can become a significant member of the project team. This usually works best if the project director recognizes that the evaluator knows more about the conceptualization, the goals, and the measurement techniques than he, the director does. If this occurs, then the evaluator is normally given a free hand, but the interested director will want immediate feed-back at critical points during the year so he can make corrective measures where necessary.

This is where the true worth of an evaluator can be felt -- helping improve the program impact on human lives, while it is an actual ongoing operation. This long range, but intangible result, will be felt long after the year-end evaluation reports have begun to collect dust in a seldom-used file cabinet.

The role of the evaluator seems to be a function of specific project reporting requirements, coupled with technical skills, personality factors, energy, resourcefulness, willingness to be helpful, faith in the project being evaluated, constraints of the "system," time limitations, and a host of other factors impinging on the total process. Each evaluator will consciously or subconsciously find his own mode of operation compatible to himself within the framework of the organization that employs him.

Concluding Remarks

This handbook was developed from practical experience in the field and was designed to be of day-to-day assistance to the relatively few practitioners of vocational program evaluation. The first few pages set the stage for the "why" of vocational programs and their ultimate need for evaluation. The bulk of the manual presents a series of actual case studies which provide some basic tools for the on-line evaluator. To those who have read the complete handbook it is probably apparent that a legal requirement for vocational education evaluation does exist and that this legal requirement is somehow to be met by the various central state agencies. These procedures will provide data that may be aggregated statewide but, in the authors' opinion, may do little to improve individual programs; especially as related to student performance, both in attitude, criterion-level achievements, and long-range success, especially compared to non-vocational students. These studies (or evaluation) must be done at the local level where administrators ideally are most aware of what needs doing and how to go about it. Hopefully this manual will be useful in promoting these efforts.

STUDY QUESTIONS PART III

a) Describe in your own words what you feel the role of the local evaluator should be - and specify impediments you foresee in its attainment.

b) Locate a school district that provides its own funds (as opposed to federal/state funds) for evaluation and analyze what evaluation functions they perform.

c) Develop an instrument for analyzing the efficacy of other test instruments. Try it out on six educators and analyze results.

d) Describe any vocational program you wish and outline an evaluation design to measure its effectiveness.

SUBJECT INDEX