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ABSTRACT

Designed for use in programs implemented under the mandate of the Youth Employment and Demonstration Projects Act (YEDPA) of 1976, this guide includes guidelines and models for conducting the evaluation, research, and demonstration efforts that local youth staff are expected to carry on in their own local YEDPA programs. The evaluation, research, and demonstration activities called for under YEDPA are discussed, and guidelines are set forth for their implementation. Presented next is a model local knowledge development case study--the Portland Career Survey Project. A developmental sketch for conducting program evaluation research, guidelines for applying an evaluative research framework to the knowledge development process, and comments on the techniques of evaluative research are provided. Discussed in a section on understanding national knowledge development are the learning focus of YEDPA and an example of discretionary project rationale. An annotated bibliography follows. (Related youth knowledge and development reports are available separately through ERIC--see note.) (MN)

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YOUTH KNOWLEDGE DEVELOPMENT REPORT 1.5

EVALUATIVE RESEARCH IN LOCAL YOUTH PROGRAMMING - USING THE TOOLS OF KNOWLEDGE DEVELOPMENT

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April 1980

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Office of Youth Programs

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OVERVIEW

In A Planning Charter for the Youth Employment and Demonstration Projects Act of 1977, the Office of Youth Programs articulated the general principles involved in the implementation of the new youth initiatives. The first principle was as follows:

> "Knowledge development is a primary aim of the new youth programs. At every decisionmaking level, an effort must be made to try out promising ideas, to support ongoing innovations and to assess performance as rigorously as possible. Resources should be concentrated and structured so that the underlying ideas can be given a reasonable test. Hypotheses and questions should be determined at the outset, with an evaluation methodology built in. This does not mean that every youth program must be experimental, but rather that we should move as far as possible in this direction nationally and locally."

National knowledge development objectives, supported by the significant discretionary authority under YEDPA, were outlined in a series of knowledge development plans. The centrally directed knowledge development activities focused on those issues requiring multi-site demonstrations, rigorous assessment and national data bases. However, it was anticipated that CETA prime sponsors, with the new resources provided under YEDPA, would try different approaches in their local contexts and would more carefully monitor and evaluate existing programs in order to see how they could be improved. Rigorous experimentation at the local level was not anticipated because of the difficulties of experimentation in an operational setting and the lack of resources locally to achieve adequate sample sizes. It was assumed, however, that prime sponsors could increase their research and evaluation activity as well as trying out some new ideas.

To achieve this aim, the grant package and regulations for Youth Employment and Training Programs required prime sponsors to identify previous knowledge development activities and to outline plans for new ones. End-of-the-year narrative reports were requested to summarize the findings of these activities.

An evaluation of local prime sponsor YEDPA performance by the National Council on Employment Policy concluded that some significant activity was generated by this mandate:

"Under the gun to do something, most sponsors responded. Some repackaged evaluation work they had already been doing and called it knowledge development. Most made an attempt at some kind of explicit evaluation experience; some were quite elaborate. A few got away with doing nothing. On the balance, though, the research and analysis mandate produced a surprising amount of new local activity.... What is especially promising is the fact that in the second year of the youth programs, local sponsors, still lacking specific national office guidance, took the initiative in judging the merits of their knowledge development projects and frequently completely revamped them."

The NCEP evaluation noted also that "prime sponsors have been almost entirely on their own when it has come to developing research, demonstration or evaluation initiatives, or testing innovative program ideas.". There was very little guidance from the Office of Youth Programs on this issue in contrast to the carefully structured nationally-directed knowledge development efforts.

Evaluation Research In Local Youth Program Development provides such direction for prime sponsor activities. It is, in essence, a framework for local knowledge development planning and implementation. Concurrently, there has been an evaluation of local knowledge development activities to identify models, and an effort to establish technical assistance capacity to provide detailed hands-on guidance to interested prime sponsors. This monograph describes not only what prime sponsors can initiate locally, but how they can utilize the products of nationally-directed knowledge development activities.

This volume is, itself, one of the many products of the "knowledge development" effort implemented under the mandate of the Youth Employment and Demonstration Projects Act of 1977. The knowledge development effort consists of hundreds of separate research, evaluation and demonstration activities which will result in literally thousands of written products. The activities have been structured from the outset so that each is self-standing but also interrelated with a host of other activities. The framework is presented in A Knowledge Development Plan for the Youth Employment and Demonstration Projects Act of 1977, A Knowledge Development Plan for the Youth Initiatives Fiscal 1979 and Completing the Youth Agenda: A Plan for Knowledge Development, Dissemination and Application in Fiscal 1980.

Information is available or will be coming available from the various knowledge development activities to help resolve an almost limitless array of issues, but answers to policy questions will usually require integration and synthesis from a number of separate products, which, in turn, will depend on knowledge and availability of these products. A major shortcoming of past research, evaluation and demonstration activity has been the failure to organize and disseminate the products adequately to assure the full exploitation of the findings. The magnitude and structure of the youth knowledge development effort puts a premium on organization and dissemination.

As part of its knowledge development mandate, therefore, the Office of Youth Programs of the Department of Labor will organize, publish and disseminate the written products of all major research, evaluation and demonstration activities supported directly by or mounted in conjunction with the knowledge development effort. Some of the same products may also be published and disseminated through other channels, but they will be included in the structured series of Youth Knowledge Development Reports in order to facilitate access and integration.

The Youth Knowledge Development Reports, of which this is one, are divided into twelve broad categories:

1. Knowledge Development Framework: The products in this category are concerned with the structure of knowledge development activities, the assessment methodologies which are employed, validation of measurement instruments, the translation of knowledge into policy, and the strategy for disseminating findings.

2. Research on Youth Employment and Employability Development: The products in this category represent analys s of existing data, presentation of findings from new data sources, special studies of youth labor market problems and policy analyses.

3. Program Evaluations: The products in this category include impact, process and benefit-cost evaluations of youth programs including the Summer Youth Employment Program, Job Corps, the Young Adult Conservation Corps, Youth Employment and Training Programs, Youth Community Conservation and Improvement Projects, and the Targeted Jobs Tax Credit.

4. Service and Participant Mix: The evaluations and demonstrations summarized in this category concern the matching of different types of youth with different service combinations. This involves experiments with work vs. work plus remediation vs. straight remediation as treatment options. It also includes attempts to mix disadvantaged and more affluent participants, as well as youth with older workers.

5. Education and Training Approaches: The products in this category present the findings of structured experiments to test the impact and effectiveness of various education and vocational training approaches including specific education methodologies for the disadvantaged, alternative education approaches and advanced career training.

6. Pre-Employment and Transition Services: The products in this category present the findings of structured experiments to test the impact and effectiveness of school-to-work transition activities, vocational exploration, job-search assistance and other efforts to better prepare youth for labor market success.

7. Youth Work Experience: The products in this category address the organization of work activities, their output, productive roles for youth and the impacts of various employment approaches.

8. Implementation Issues: This category includes cross-cutting analyses of the practical lessons concerning "how-to-do-it." Issues such as learning curves, replication processes and programmatic "batting averages" will be addressed under this category, as well as the comparative advantages of alternative delivery agents.

9. Design and Organizational Alternatives: The products in this category represent assessments of demonstrations of alternative program and delivery arrangements such as consolidation, year-round preparation for summer programming, the use of incentives and multi-year tracking of individuals.

10. Special Needs Groups: The products in this category present findings on the special problems of and adaptations needed for significant segments including minorities, young mothers, troubled youth, Indochinese refugees and the handicapped.

11. Innovative Approaches: The products in this category present the findings of those activities designed to explore new approaches. The subjects covered include the Youth Incentive Entitlement Pilot Projects, private sector initiatives, the national youth service experiment, and energy initiatives in weatherization, low-head hydroelectric dam restoration, windpower and the like.

12. Institutional Linkages: The products in this category will include studies of institutional arrangements and linkages as well as assessments of demonstration activities to encourage such linkages with education, volunteer groups, drug abuse agencies and the like.

In each of these knowledge development categories, there will be a range of discrete demonstration, research and evaluation activities, focused on different policy, program and analytical issues. For instance, all experimental demonstration projects have both process and impact evaluations, frequently undertaken by different evaluation agents. Findings will be published as they become available so that there will usually be a series of reports as evidence accumulates. To organize these products, each publication is classified in one of the twelve broad knowledge development categories, described in terms of the more specific issue, activity or cluster of activities to which it is addressed, with an identifier of the product and what it represents relative to other products in the demonstration. Hence, the multiple products under a knowledge development activity are closely interrelated and the activities in each broad cluster have significant interconnections.

This framework for local knowledge development activity is closely related to all of the products in the "knowledge development framework" category. It should also be assessed in conjunction with Youth and the Local Employment Agenda in the "program evaluation" category as well as Local Mixed Income Testing in the "service and participant mix category" which assesses the success and problems prime sponsors have had in pursuing the knowledge development mandate.

ROBERT TAGGART
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Office of Youth Programs

CHAPTER I

WHAT IS KNOWLEDGE DEVELOPMENT?

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WHAT IS KNOWLEDGE DEVELOPMENT?

Understanding the KD Challenge

A primary emphasis of the youth employment and demonstration projects is on learning about the nature of employment problems among youth, and about the appropriateness and effectiveness of a variety of strategies for dealing with these problems. The hope of DOL is that a few years of well-documented research, evaluation, and demonstration projects will yield information for making programs more effective in the long run.

This learning component of the Youth Employment Demonstration Projects Act (YEDPA) was dubbed "knowledge development" at the inception of the Act. The first of ten principles in the YEDPA planning charter stated that a principal objective of YEDPA is to develop knowledge from the youth initiatives about how to best assist youth.

It is crucial for local youth staff to realize that KD has a dual focus: the national level and the local level. At the national level, the Office of Youth Programs (within the Employment and Training Administration) is overseeing a broad, structured array of multi-site demonstration projects, large scale evaluations, and coordinated research efforts, all funded with discretionary funds.

The largest of these discretionary projects is the Youth Incentive Entitlement Pilot Project (YIEPP), for which 17 prime sponsors across the country were selected to operate very structured pilot projects testing the effects of guaranteed jobs on school

dropout rates and youth employment behavior. Although directly funded and directed by the national office, most of the over 200 demonstration and evaluation activities were conducted at local prime sponsor sites. The results of these findings will be of great importance to prime sponsor youth staff. As of FY'80, a principal focus of the Office of Youth Programs is to synthesize and disseminate the results of discretionarily funded projects to prime sponsors. National knowledge development organization is further discussed in Chapter 4.

The other aspect of knowledge development activities, that which is emphasized in this guide, is the evaluation, research, and demonstration effort all local youth staff are expected to carry on in their own local youth programs. DOL hopes, on the one hand, that these KD findings will benefit individual local youth staff immediately and directly by increasing their understanding of the youth employment problems and programs in their respective areas. On the other hand, it is also hoped that these local knowledge development efforts will encourage local administrators to institutionalize processes for assessing youth programs and utilizing evaluation findings in new local policy formulation. However, it is important to note that these hopes for local knowledge development efforts stem primarily from the federal perspective of what prime sponsors should be doing. In fact, local youth staffs' interpretations of the value, functions, and purpose of local knowledge development have often varied considerably from that of the national office. A brief examination of prime sponsor reactions to, and experiences with, KD in FY '78 and FY '79 may assist the reader in grasping the principal pitfalls, as well as promises, of local knowledge development.

Two of the most important sets of realizations about local conduct of knowledge development activities concern making methodological and locally relevant decisions. As a general rule, less elaborate, basic approaches to youth program assessment often

provide more fruitful results than the use of more sophisticated approaches. In FY '78, many prime sponsors and subcontractors interpreted knowledge development as a mandate to do elaborate social experimentation. Such experimental social design often included experimental and control groups of participating and non-participating youth. Such approaches often included the 10% mixed income test, which examines the notion that mixed income participant backgrounds provides for improved youth outcomes. Generally speaking, these more sophisticated experimental approaches to assessing youth program outcomes were not successful. This is not to say that some good ideas were not being inspected, but that the manner of inspection was often inappropriate and did not work. For example, youth staff found that in decentralized balance of state prime sponsorships, it was not practical to set up tight experimental conditions. More centralized prime sponsors, on the other hand, discovered the difficulty of maintaining sufficient control group size. Youth staff also found that experimental models were often awkward and unrealistic because staffs were not able to control, or even adequately measure, non-income variables. Then too, youth planners found that findings from the experimental approach were often too late to be politically useful.

Learning from their mistakes, many primes and subcontractors took simpler, more basic approaches to youth program assessment in FY '79. Less elaborate approaches often proved to be more manageable, more likely to provide locally useful information, and to serve as building blocks for expanded and/or slightly more sophisticated projects.

A second, related lesson of knowledge development for local youth staff in FY'78 and FY '79, is the importance of focusing local youth program evaluation interests on variables under the control of the local prime sponsorship. A local learning focus

provides year to year continuity and cumulative progress in local knowledge development efforts. By contrast, less fruitful results were provided by local knowledge development efforts investigating questions of mainly academic interest or broad policy issues, which could principally be settled only at the federal level (e.g., 10% mixed income tests).

Benefiting from these lessons, this guide emphasizes the utilization of relatively more straightforward approaches to youth program assessment and evaluation, although it also contains advice and instruction in conducting more sophisticated experimentation. In particular, the guide presumes that the principal reason for local youth staff to conduct knowledge development activities is for the purpose of supporting locally initiated youth program policy change. The guide's message is equally applicable for youth employment and training program staffs in CETA prime sponsors, school districts, CBOs, various LEA and CETA subcontractors, and similar agencies.

The model approach to knowledge development, discussed in the following section, is based on many observations of how local youth staff have successfully approached the learning cycle of youth program planning and design, program delivery, assessment, and redesign. The general approach to KD described here places highest priority on the development of realistic and useable information for local policy purposes, and suggests that the choice of specific evaluation tools and approaches be largely dependent on how much is currently known about the specific local program being assessed, as well as on what is practical with given resources and expertise.

Toward A Working Understanding of the Knowledge Development Process

A general model which synthesizes and summarizes the approach that many local youth staffs have successfully used is presented and discussed in this section. An understanding of this model at the outset should give the reader a general background of the knowledge development process, as well as a feel for key decision points along the way. A case study example of a prime sponsor's utilization of this knowledge development model through several program development cycles of a particular youth program is subsequently presented in Chapter 2. Some readers may wish to consider this specific case study prior to examining the more general presentation of the basic KD approach as discussed in this section. In either case, it should be recalled that the model presented here is based on analysis and observation of the ways many local youth staffs have successfully approached learning from their youth programs. The basic approach which emerges may be utilized on many different levels, from the simplest and most straightforward youth program development efforts of very small rural prime sponsors or subcontractors to the most sophisticated and research-oriented ones of large urban primes, LEAs and CBOs. The basic logic of the approach remains the same.

At the [redacted] level, knowledge development is probably best understood as being synonymous with what most youth coordinators think of as "youth program development." As shown in Figure 1-1, the basic program development process usually consists of:

1. Planning and design: Identifying the problem, setting goals for problem solutions, examining alternative solutions, and designing a program of youth services
2. Implementation: Implementing the program of youth services

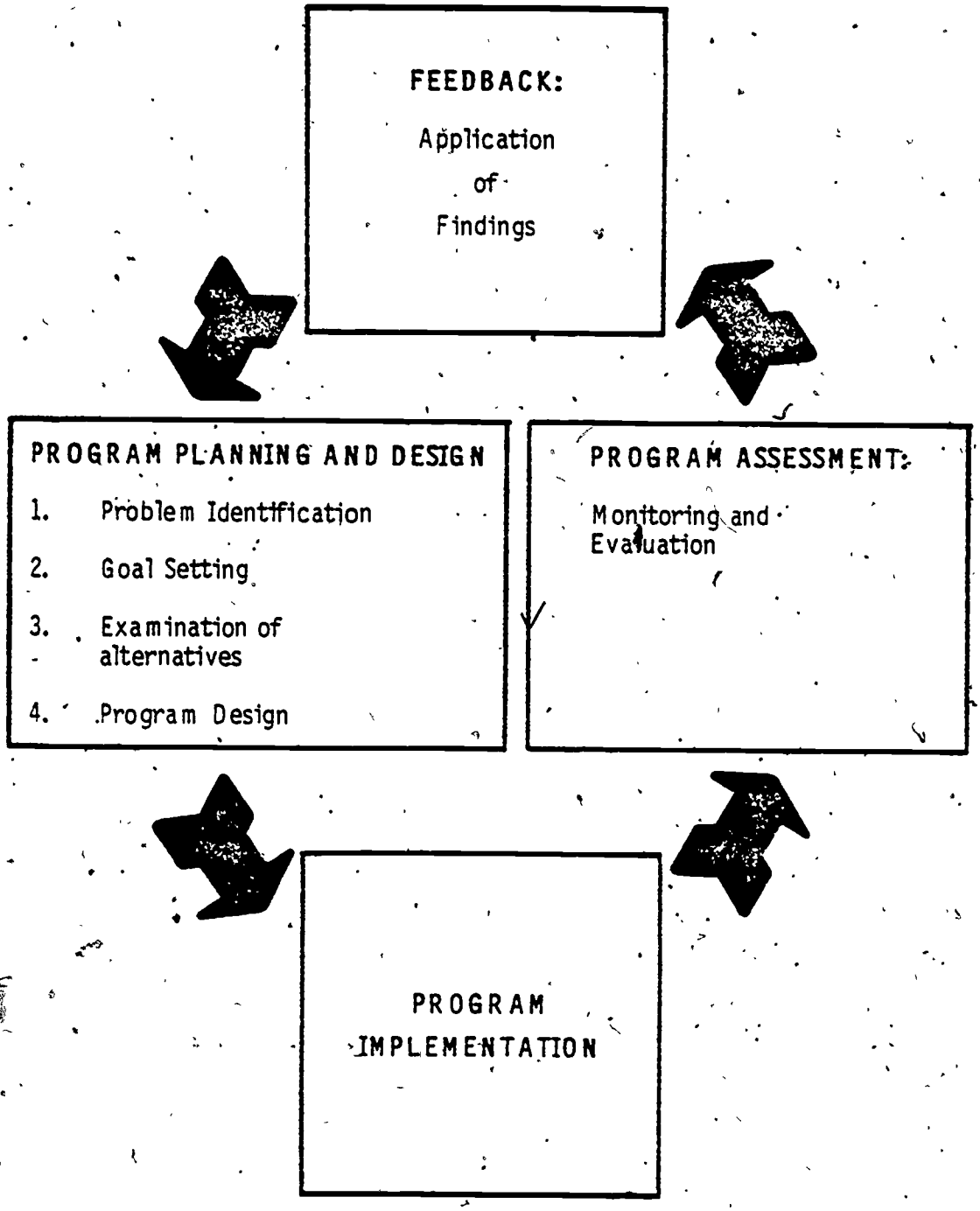

FIGURE 1-1: THE PROGRAM DEVELOPMENT PROCESS

3. Assessment: Monitoring and evaluating the implementation and results of the youth services program

4. Feedback: Applying the results of monitoring and evaluation findings back into the original problem identification and allowing for subsequent modification. The cycle may then be repeated, though at a more developed level of experience (or knowledge base). Learning has occurred.

In knowledge development, considerable emphasis is often placed on the program evaluation component of the development cycle. Even so, it is crucially important to understand that all the elements of the local youth program development cycle must fit together as parts of a whole. Thus, the program development elements must link and interact in a compatible way.

For example, it would not normally be wise to design and demonstrate a new career awareness program, then narrowly evaluate the implementation phase by experimental comparison of precise participant test scores of some sort. In such a case, our evaluative approach would be "out of sync" with the developmental level of our program planning design and implementation. Instead, we might prefer to evaluate the demonstration implementation by using simple quantitative measures (planned vs. actual enrollments, terminations, placement rates, expenditure rates, etc.) along with qualitative indicators (interviews with counselors, participants, others).

The cumulative learning approach to youth program development modeled in Figure 1-2 emphasizes the importance of focusing on locally relevant program questions, as well as appropriately tailoring assessment style to the stage of program development. Youth planners, typically, are immersed in an ongoing system of program development.

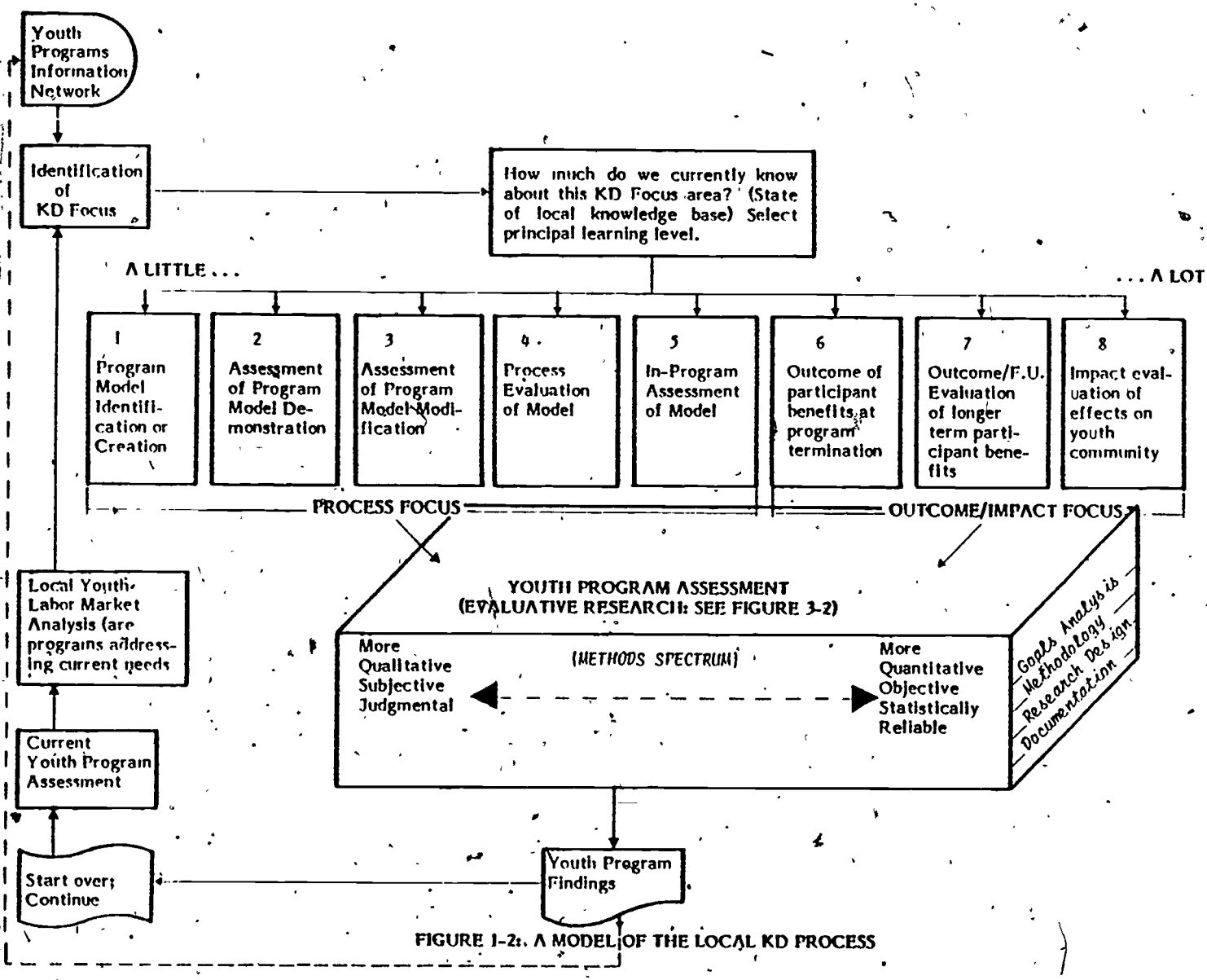

FIGURE 1-2: A MODEL OF THE LOCAL KD PROCESS

However, for purposes of understanding the model KD approach, we can break into this continuous cycle of program development at the point labeled in Figure 2-1 as "Current Youth Program Assessment." Here we are examining the findings of how well our present youth programs are operating, their cost effectiveness, how well they are being received by youth participants, and, as far as we can determine, the impact these programs are having on participants.

Next, we analyze the local youth labor market, asking ourselves such questions as: Are the youth programs being offered addressing current youth needs in the community? Are changes in the youth community, regulatory changes in target group identification, or other circumstances creating new needs and, perhaps, new unknowns?

Usually problems or questions we need more understanding about will emerge from this effort to clarify and focus our youth program offerings. Here is the raw material out of which we can begin to identify the knowledge development focus which is "right" for our jurisdiction. Although the focus area stems from our assessment of current offerings and needs in <u>local</u> youth programs, we will, of course, bring together a broad array of external tools and resources to meet this challenge. For example, we may pull upon past experience in our own staff for youth programming. Each experienced youth program staff member involved in the planning effort will most likely draw upon experiences and lessons learned in somewhat similar situations elsewhere. Then too, there is the ever changing, ongoing sense of understanding about what works and what does not work in youth programming which is shared by all employment and training youth program staffers. Although this "invisible college" or body of professional understanding thrives and is communicated in a number of ways, probably the most important method utilized by youth staffers in obtaining this information is informal

communication with colleagues in other jurisdications or locations. A "Knowledge Development Interest Network" now exists to help energize this ongoing, evolutionary network of understanding about what does and does not work in youth programming. By tapping into this body of professional understanding when identifying our own local youth program needs and knowledge development focus, we can avoid re-inventing the youth program wheel.

In reviewing, prioritizing, and selecting our specific KD focus, we may find it useful to distinguish between questions of "program" focus and "variable" focus. That is, are we principally interested in the purely practical outcomes of a specific program at a specific time (program questions), or are we more interested in singling out specific components of the program as more generalizable stimuli? In other words, if we can focus upon learning about the general variables underlying a program (rather than upon the effectiveness of the program as a whole), we may produce findings of greater local significance. This point is especially relevant to learning from demonstration projects.

An example may help illustrate this point. Suppose we wish to learn about a youth career information center demonstrated in a local high school. Measuring the number of center users (for example) will be necessary for reporting purposes, but may help us learn only about this specific center. However, if the center is set up to test some specific principle or variable in youth career center establishment, say, the relative effectiveness of personal versus formal appeals for attendance, our results may have greater transferability to other local career center situations*.

*Thus emerges a possible difference between "Knowledge Development" and "program evaluation". The development of relevant local knowledge tends to stress continuity and cumulativeness of youth program findings, while purely conventional program evaluation is often a one-shot proposition. The difference between the two is found in the rationale, focus, and definition of what we wish to learn, rather than in the specific methods and techniques of study.

Assuming the identification of a realistic and locally relevant learning focus for our youth programs, we must consider how much we actually know about this particular local KD concern. This important consideration will obviously have a great impact on the way we approach designing the program of youth services to be offered, as well as the way these services are actually delivered. For example, if we know very little about a new CETA-LEA linkage we would like to establish, it is likely that our first order of business will be to select a program model or approach to the possibility of this new linkage. The source of this program model might be our unique local insight into local needs, or it might represent an "imported" idea or variation of an idea borrowed and adapted from another prime sponsor.* Next, we would probably design and implement a model demonstration of the CETA-LEA connection we wish to try out.

It may be that we have already gone through an original program development cycle demonstrating this new institutional linkage, in which case, it is likely that unless the demonstration was clearly unsuccessful, we will be interested in running a modified version of the original model or approach. This modification will incorporate what we have learned from the initial model demonstration. The planning-delivery-feedback-modification cycle will continue, each cycle adding to our understanding of the evolving CETA-LEA approach that works best for us. As our understanding becomes more and more complete, we are able to ask and answer more and more specific questions about the nature of what works in our CETA-LEA coordination effort and what does not.

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* Exportation and importation may occur in various ways: e.g., through the Knowledge Development Interest Network, through DOL Regional federal representatives or youth coordinators, through the Office of Youth Programs, through prime sponsor associations, through the youth program "information broker" described in Chapter 4, or through more informal professional exchange.

Thus, at each program development stage, we consolidate and apply what was formally and informally learned from the last development round, finding ourselves at a sort of frontier or margin of understanding about the particular situation. The next bite, or increment, of unknown area to be explored at this frontier contains future candidates for knowledge development which will be considered and prioritized for our next round of program development. We move from a relatively general to an increasingly particular and complete development of understanding about the particular youth program being considered.

Identifying the type of knowledge development inquiry which is appropriate for a prime's specific youth program demands an accurate understanding of how much is collectively known locally about the particular program approach at the time. The more we know about the program, the more specific and precise we can be in the nature of the questions we ask and answer about the program. In some ways, this question fitting process is comparable to deciding how far out on the ice you should walk on a newly frozen pond. As you walk closer to the middle of the pond, you leave more solidly frozen ice and risk a dunking. So too, if we attempt to ask and answer overly specific questions about a youth program prior to developing a firm understanding of how the process works, we risk procedural failure in our analysis or, at least, the possibly of collecting information which is erroneous or useless.*

In Figure 1-2, eight sequential levels of evaluative focus are identified which correspond or are parallel with a general spectrum of program development. Although the sequence may be reorderd to fit specific local circumstances, the progression shown depicts a logical, essentially chronological order of assessment foci. For a given developmental stage of a program, it is likely that a local youth staff will find it appropriate to orient its assessment around some point along this spectrum. Positions

shown in Figure 1-2 include:

1. Program identification or creation. Assessment of a model program approach which has either been internally generated or modified from an approach used elsewhere.
2. Program Model Demonstration. Process evaluation of initial model demonstration.
3. Program Model Modification. Predominantly a process oriented evaluation of a modified version of the original demonstration model. Some simple outcome measures may begin to be used at this point.
4. Process Evaluation of the Model. Possibly done separately from Step 3, if circumstances warrant a general program implementation assessment. If included, outcome measurement is still simple and de-emphasized; but it is likely to be of increasing importance and credibility.

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* A process study provides information about the means employed in a program to produce specified outcomes. Especially important during the developmental phases of a model or program component, process studies are often employed before the program as a whole can be described. Thus, process studies of program implementation are common, examining, for example, attendance rates, component completions, staff-participant ratios, rates or types of attitudinal change, termination by reason, etc. Process studies can not only help develop the program, but they also help to conceptualize what the program is and how it works.

An outcome study describes the results of the program process on program participants. Outcome studies are typically concerned with producing a summary statement about the effectiveness of the program or some phase of it. Both the audience and timing involved in outcome evaluations will be different than in a process study.

Impact studies try to measure the overall effect of a program, including the achievement of goals in behalf of the target group, as well as the difficult-to-measure side effects of the program on the general population or community. Some evaluator's terminology doesn't distinguish between "impact" and "outcome" measures, typically lumping both under the term "impact."

An evaluation study often blends outcome and process. It may be useful to have process data to assist in the interpretation of outcome results; so, too, it may be appropriate to incorporate an outcome measure into a predominantly process oriented study. Nonetheless, the basic orientation of an evaluative study as a whole is like to fall into one category or the other.

5. In-Program Assessment of the Model. Evaluation of the interactional effects between the study program component or program and other, on-going, components or programs. May be part of Steps 3 or 4. Example: A new intake approach has been tested "in isolation" in earlier steps of the sequence; now we concentrate on the "ecological" effects of the new approach in the total program environment.

6. Outcome Evaluation of Participant Benefits -- At Program Termination: Ideally, we now have a rich "process" understanding of the program approach as it has developed. We now begin to focus predominantly on the measurement of outcome effects of the program on its participants, though we continue to make process observations. Our process/outcome balance has reversed its position from that in Steps 1 and 2. Rather than just drawing inferences, we may now wish to move toward answering program outcome effectiveness questions in terms of how sure we are that our program actually causes the outcomes we claim.

7. Outcome Evaluation of Participant Benefits -- Longer Term Benefits: Similar to Step 6, but involving follow-up of participants over some period.

8. Impact Evaluation of Effects on the Youth Community: Our focus turns to estimating or measuring the "ripple effects" of our program on the larger local youth community or the local geographic community of which the program participants are part.

Within a single program development cycle, youth staff may choose to focus their learning efforts on more than one of these levels, simultaneously or sequentially. An obvious limitation on the scale of the learning effort is resources -- time, money, and expertise. However, it is important to realize that an inherent, "horse before the cart" logic acts as a delimiter as well. For example, it generally doesn't make sense to narrowly measure career guidance outcomes prior to first answering such questions as

"Does our new program include career guidance at all?"

The rate of progression through the learning/assessment spectrum will also be delimited by local youth staff resources and by the practical length of a program development cycle. For example, two-week cycles of intense remedial reading may pass through multiple development/learning cycles a more elaborate program of services passes through only one cycle.

Just as clarification of our program's stage of development helps determine the proper assessment style (along the process-outcome evaluation spectrum), so, too, does this clarification have implications on our choice of assessment methods.

As will be discussed more completely in Chapter 3, process oriented levels of inquiry are often most appropriatley approached using predominantly qualitative, subjective, and often judgmental methods of analysis. However, this is not to suggest that simple quantitative data should not be collected at this early stage. For example, quarterly characteristics summaries and basic MIS data will always be collected for any program and will, typically, be of great use in process evaluations. More precise types of quantitative measures (such as various test results) are necessary to answer outcome evaluative questions. Thus, in those levels of inquiry where our principal focus is on outcome or impact measurement, we will predominantly be interested in collecting precise quantitative information — although even then we may continue to have an interest in collecting at least some qualitative information to provide a context of understanding for our more precise quantitative findings.

Regardless of which particular integration of program development stage, assessment/learning focus, and method orientation makes sense for a given youth program, youth staff will generally apply a basic evaluative research approach to come up with

their findings. This evaluative research logic, further discussed in Chapter 3, involves goal analysis, methodological considerations, a research plan or design, and documentation.

The key to the entire local knowledge development effort is in the utilization of results. If assessment results are not utilized, there is very little reason to obtain them. Much of the remainder of this guide more specifically explores the application of assessment methods to the systematic aspects of learning from local youth programs.

CHAPTER II

A LOCAL KNOWLEDGE DEVELOPMENT CASE STUDY:

THE PORTLAND CAREER SURVEY PROJECT

CHAPTER 2

A LOCAL KNOWLEDGE DEVELOPMENT CASE STUDY: THE PORTLAND CAREER SURVEY PROJECT

This case study was selected to illustrate how the knowledge development process occurs. Although the composite of locally generated knowledge development subject areas is vast, this case study represents one prime sponsor's attempt to focus local learning efforts on a single program category to determine the issues to concentrate on, design an approach to deal with the identified needs, and demonstrate, assess, and continually refine, the approach.

The case study is representative of the youth program development process because it illustrates how the insights and knowledge gained from each program cycle are used to continually modify the program approach so that it better meets the needs of the target population, and because it adds to the local youth staffs' understanding of which approaches work best for which groups of youth. The case study illustrates how a prime sponsor, in its attempt to upgrade programming and be responsive to the dynamics of youth employment and training works through the knowledge development process (Figure 1.2: A MODEL OF THE LOCAL KD PROCESS).

The rationale for utilizing a case study is based upon the reality that specific, observable processes and stages of program development do occur in the real world of youth employment and training, and that those processes occur systematically and can be captured, documented, and utilized to further enhance the effectiveness of local youth programming.

The case study depicts a chronological progression in program development and scope and describes the various phases of the local knowledge development process. Specific

emphasis is placed on the elements of youth program assessment. The importance of focusing on process-oriented questions during the early stages of program development and implementation is exemplified, as is the appropriateness of focusing on outcome and impact questions during the latter stages of program development. The usefulness of qualitative and quantitative assessment techniques in seeking answers to "how a program works and why" and "what types of benefits or impact this program has on the youth participants" is highlighted. The purpose is to show how low-cost, simple, and effective assessment methods can be combined with easily gathered numerical data to tell us what is working well within a program and which program elements are not bringing about the desired results. The case study also underscores the vital role of "goals analysis" in moving through the knowledge development cycle in an orderly and systematic way.

The Portland Career Survey Project was selected because of the availability of information and documentation with which to track the knowledge development process from the program's inception (1974) to its current state. In addition, the program has passed through several iterations of the KD Model Process and has been replicated in similar settings. Moreover, the Portland Career Survey Project represents a prime sponsor's practical, although imperfect, effort to learn from, develop, and refine youth programming strategy in a low-cost, effective manner.

PROJECT PROFILE

The Career Survey Project is a career awareness program designed for 14 and 15 year-old economically disadvantaged youth. The Project, designed by the City of Portland, Oregon, Prime Sponsor provides hands-on career experiences and career information through direct exposure to 10 career cluster areas: office occupations, small engine repair, electronics, data processing, communications/broadcasting, food services, patient care, graphic arts, construction technology, and engineering. The project is

operated during the summer in a community college setting.

The project serves youth who normally do not take advantage of the career education training available in public high schools. By identifying these youth and giving them the opportunity to earn money while being exposed to aspects of employment in 10 career areas, it is anticipated that they will be better able to make career and educational decisions affecting their futures.

Features of the Career Survey Project

- Allows a prime sponsor to create well-structured, substantive summer career exploration experiences for 14-15 year-old youth
- Youth like it
- Low-cost; easy to administer
- Provides youth with career experiences fulfilling state and local academic credit requirements
- Effective for youth with short attention spans and basic skill deficiencies
- Easily replicated (the Project has been replicated at two community colleges; the project design was used as the basis for a university-based knowledge development project (University of Oregon Medical Careers Exploration Project)
- Lends itself to replication in industrial and business environments
- May be adapted to serve specific client groups
- Project structure easily accommodates joint sponsorship across prime sponsor jurisdictions (Summer Youth Employment Program (SYEP) youth from two prime sponsors areas participate in the project on a cost-share basis.)
- High school counselors are supportive of the project; recruitment and academic credit provision are facilitated by such endorsement

Prime Sponsor Description: City of Portland, Oregon

Portland is a city of 385,000, the center of a metropolitan area containing 1.1 million people. CETA is administered by the City Human Resources Bureau; Youth CETA services are administered through a network of youth career training centers. These City operated training centers provide comprehensive services for out-of-school youth and administer programs for in-school youth. Services to I/S youth are provided via a non-financial agreement with Portland Public Schools. Formula youth CETA dollars allocated in FY'79 amounted to $3,245,000.

Logistics of Project Operation

The Project is operated via contract between the City of Portland Prime Sponsor, Portland Community College, and Portland Public Schools. Portland Community College conducts the project; Portland Public School assumes advisory and youth referral responsibilities.

The project, operative since 1974, has undergone five modification cycles, each cycle providing a slightly different focus and level of refinement. However, the core design involves the rotation of youth through career awareness and exploratory classes in 10-career cluster areas. Community College instructors design the curriculum around the career information and participatory (hands-on) focus of the project, and youth (grouped in teams) rotate from one cluster area to another on a weekly basis under the guidance of a team leader. Each youth spends 3 hours per day in career exploratory classes and 3 hours per day in supervised work activities.

The adult team leader serves multiple functions. The team leader monitors the team's flow through the system, supervises team work activities, acts as an instructional aid to the career cluster instructor, maintains participant time and attendance reports, and provides counseling to youth participants.

Initially, in 1974, the project served 50 youth. As time progressed, the Prime Sponsor and School District recognized the value of the summer career exploration concept and took measures to refine the project and extend the experience to increased numbers of SYEP youth. The following table (2-1) reflects the growth factor (increase in participants served) as well as the characteristics of the participants. Figure 2-2 reflects the cost of the project's operation.

TABLE 2-1 CAREER SURVEY PROJECT PARTICIPANTS: NUMBERS SERVED/ CHARACTERISTICS

2-1a Participants Characteristics (based upon 1978 project operation):

AGE	% OF TOTAL	RACE	% OF TOTAL
14	32%	Black	42%
15	43%	White	44%
16	21%	Asian	12%
17	2%	Native American	2%
18	1%		
19	1%	SEX	
		Male	58%
		Female	42%
		HANDICAPPED	13%

Note: Although the project served youth 14-19 years of age, the typical participant was 14-15 years old, economically disadvantaged (70% LLSIL), a freshman or sophomore, and deficient in basic skill areas.

2-1b Number of CSP Youth Participants

1974: 50

1975: 108

1976: 240*

1977: 240*

1978: 240*

1979: 240*

TABLE 2-2 CAREER SURVEY PROJECT COST (BASED UPON 1978 PROJECT OPERATION: ONE SITE)

- Funding Source: Summer Youth Employment Program
- Total Project Cost: $19,726 (Exclusive of participant wages)
- City of Portland Prime Sponsor Cost: $16,171 (83.3% of Total)
- Multnomah-Washington CETA Consortium Cost: $2,955 (16.7% of Total)
- Cost includes: 10 half-time instructors, 1 full-time coordinator, materials and supplies, mileage
- Number of participants: 120
- Project Cost per Participant: $164
- Participant Salaries; $509 per youth (192 hours x $2.65)
- Total Youth Participant Wages: $61,080

*The 240 figure reflects project operation at two community colleges: 120 youth per site.

Note: The City of Portland Prime Sponsor contracts with Portland Community College, the project operator. School District responsibilities, identification/-referral of youth and academic credit provision, are included in a non-financial agreement negotiated between the City of Portland and Portland Public Schools. A financial agreement negotiated between the City of Portland and Multnomah-Washington CETA Consortium, the neighboring prime sponsor provides for participation of youth from the 2 prime sponsorships on a cost-share basis.

The Program Development Process

An analysis of the Career Survey Project's evolution can be pictorially illustrated in a general model (Figure 1-1), as well as in a more detailed, phase-specific mode (Figure 1-2). A Model of the Local Knowledge Development Process merely provides a more in-depth view of the "Program Development Process."

The following analysis attempts to describe how we learn about youth programs by referencing key stages in the Career Survey Project's development, and by capturing the systematic, orderly flow of program development processes to better understand and use the learnings gleaned.

Current Youth Program Assessment: Policy Analysis and Needs Assessment

The "current youth program assessment" process emanated from an informal series of discussions between prime sponsor and school district representatives. The principal issues that emerged included the quality of work experience placements made within the summer youth employment program, and the extremely low enrollment of youth in vocational/technical courses offered during the academic year within local high schools.

An analysis of the two issues began. Prime sponsor and school district representatives agreed to approach the examination of each issue by isolating the questions for which they sought answers:

1. Why had previous efforts to increase the number of summer work sites providing quality supervision and training been less fruitful than anticipated?

2. What dynamics contributed to the placement of the more mature 16 and 17 year-old SYEP population in the most substantive job sites?

3. Conversely, what dynamics contributed to the recurrent appearance of a 14 and 15 year-old "left-over pool", the majority of whom were placed in less attractive, lackluster work sites, which offered little substantive training?

4. How could the provision of well-structured career experiences be increased for the 14-15 year-old group?

5. Why, after local high schools had recently increased the quantity and quality of vocational course offerings, were enrollment levels in such courses frightfully low?

6. Why were high school students, already severely deficient in basic skills, opting for college preparation courses, failing, and dropping out?

7. Why was the enrollment in community colleges offering high school completion programs with vocational training options increasing so rapidly, while high school dropout rates were higher than ever?

The Prime Sponsor/School District team began to gather data to assist them in concurrently analyzing policy and assessing needs. Simple, quantitatively-oriented surveys were conducted to determine the relationship between high-school enrollment levels and drop-out rates of local youth for GED completion in technical training courses. Interviews with school district career education staff and high school students, a qualitative approach, was used to gain a better understanding of <u>why</u> enrollment in high school vocational/technical courses was so low.

The data and information gathering process enabled the Prime Sponsor/School District team to conclude that:

- o A substantial number of high school students who had "dropped out" subsequently enrolled in GED completion/vocational training courses
- o The majority of high school youth had, at most, a limited understanding of the career education/vocational training options available to them
- o Enrollment in school district sponsored career education courses did not carry sufficient status to entice students who may have benefited from such training
- o Youth needed to be exposured to the realities of the job market
- o More effective methods of providing labor market and career information to SYEP participants needed to be developed
- o Well-structured career experiences for 14 and 15 year-old SYEP participants needed to be generated

It began to be obvious that SYEP resources should be used to address these issues. The problem identification process enabled the Prime Sponsor/Staff District Team to set goals. Then they formulated a statement of purpose:

"To encourage the student population to make earlier career plans and take advantage of vocational training opportunities that may be commensurate with their career interest areas."

The statement of purpose evolved into a goal statement: "To allow students to make better informed career decisions through hands-on exposure to vocational and technical careers and career information dissemination by attending summer exploratory career workshops."

The knowledge development focal area had been identified.

Selection or Creation of a Model Phase

The PS/SD team conducted a local search for existing models. Although no such model existed within the Portland Public School system at that time which could be replicated salient features of distributive education and cooperative alternative education approaches were identified. A survey of the local comunity college system indicated that career exploration activities of the nature sought were not in existence, nor were community colleges serving economically disadvantaged 14 and 15 year-olds. A poll taken of neighboring prime sponsors confirmed the opinion that similarly focused projects had not been devised. Although the PS/SD team recognized that prime sponsors having similar target populations and geographical characteristics most likely had identified similar programmatic needs, the team did not consider tapping out-of-state prime sponsors.

In retrospect, a significant amount of planning/design time could have been saved had similar program models been "imported" for replication or adaptation.

The PS/SD team elected to create a model to meet the specific needs of their locale.

Project Goals Analysis

The PS/SD team initiated the Model Design phase by integrating general systems goals identified by the Prime Sponsor for program development with the needs statements generated by the school district staff. A critical juncture in the program development process occurred when a "goal statement" consensus was reached. Specific objectives and productivity indicator statements were delineated which, the team felt, would be indicative of goal attainment.

Figure 2-3-Career Survey Project Objectives and Productivity Indicators, and Figure 2-4-Statement of Activities/Timeline for Each Objective, reflect the outcome of the

FIGURE 2-3:
CAREER SURVEY PROJECT OBJECTIVES AND PRODUCTIVITY INDICATORS

OBJECTIVES	PRODUCTIVITY INDICATORS
1. To increase 120 participants' understanding of vocational/technical careers by providing exploratory education classes in 10 vocational areas.	1. - Students knowledge of careers as measured by pre-test and post-test. - Degree of difference between pre-test and post-test. - Increase 120 participants' exposure to job opportunities in ten (10) vocational clusters. - Increase of 120 participants' knowledge of skills, aptitudes, and interests required for success in ten (10) vocational clusters. - Number of vocational cluster areas attended by each participant. - Average number of hours spent per participant in each vocational cluster. - Range of hours attended by 120 participants. - Number of youth enrolled at the end of the project. - Number and types of "hands-on" experience provided in each cluster.
2. To increase 120 participants' utilization of vocational/technical resources within the high schools by fifteen (15) percent.	2. - Number of participants enrolled in vocational/technical courses during the academic years prior to 1978-1979. - Number of students enrolling in vocational/technical classes after participation in the Career Survey Project.
3. To increase 120 participants' understanding of their obligations as employees by requiring attendance at sixty (60) percent of the sessions over the length of the project.	3. - Attendance records. - Range of hours attended per participant.
4. To increase the employment opportunities for 120 economically disadvantaged youth by employing them during the summer in supervised work and instruction activities.	4. - Total dollars paid to participants. - Averge allowance amounts earned per participant. - Hours of work performed. - Total number of youth employed.
5. To maintain effective leadership and administrative management for the Career Survey Project during Summer, 1978.	5. - Number and dates of activities listed under activities 5.1, 5.2, 5.3, etc.

FIGURE 2-4: STATEMENT OF ACTIVITIES/TIMELINE FOR EACH OBJECTIVE

Objective #1: (Re-state objective here)

To increase 120 participants' understanding of vocational/technological careers by providing exploratory education classes in 10 vocational areas.

No.	Activity	Completion Date	Measure of completion of activity	Other Agencies Involved
1.1	Develop curriculum	5-31-78	Written course outline and course description of each instructional component submitted by each of the 10 instructors to the City. Courses provided as planned.	PCC, HRB
1.2	Hire 10 instructors and secure facilities for classes to meet.	5-15-78	Contract with PCC	HRB, PCC
1.3	Develop recruitment criteria for participants	5-01-78	Written criteria	HRB
1.4	Recruit participants from eligible SPEDY clients	6-02-78	Participants recruited and enrolled	PPS, HRB
1.5	Assign instructors	5-15-78	Schedule for instructors complete	PCC
1.6	Assign participants	6-15-78	Participants assigned to teams	HRB, PCC
1.7	Recruit team leaders	6-02-78	Appicants interviewed and 9 team leaders hired	HRB, PCC
1.8	Assign team leaders to teams of participants	6-15-78	Team leaders assigned to teams of participants	PCC, HRB
1.9	Develop orientation for team leaders	6-15-78	Orientation agenda developed	PCC, HRB

goal setting effort. The figures provide a sampling of the goal analysis results, which were developed for the 4th cycle of the project (1978). The program operator (Portland Community College), as its operational expertise increased, assumed an active role in suggesting structural modifications.

The objectives, productivity indicators, and activity/timeline statements reflect a much more specific, extensive, and quantitative design than those developed the first year. Most of the productivity indicator over-hauling occurred during the second year. Formally defined activities and timelines were developed the third year.

The refinement of these items was an outgrowth of program experience as the project evolved through the Demonstration, Modification, Process Evaluation, In-Program Analysis, and Evaluation of Participant Benefits at Program Termination Outcome stages. Goals, objectives, and productivity indicators were continually reassessed, re-focused, and re-written for the succeeding program cycle.

Learnings from each modification cycle contributed to an increasingly specific and more thorough knowledge of which program approaches work best.

The goal setting and refinement process was crtitical; it allowed planning, implementation, and project assessment to occur in an orderly, systematic way. It insured that the concept of the project was clarified in advance, and that activities were operationally defined.

Model Demonstration

The model was implemented via contract with Portland Community College (Summer, 1974). The majority of administrative energy focused on insuring that the program

was initiated and completed (more commonly referred to in youth programming circles as "get the program up and rolling"). The assessment was based largely upon a qualitative format, but included some quantitative data. The principal instruments included instructor questionnaires (narrative responses), program coordinators' project-end reports (identification of program strengths/weaknesses/recommendations for change), and team leader project critique sessions. The rationale for the use of such qualitatively-oriented instruments is based on the "process evaluation" thinking discussed in Chapter 1 and, in more detail, in Chapter 3.

In the early stages of program implementation, it is appropriate to concentrate on assessing the general workings of the program (the macro-approach) rather than on the measurement of outcomes. The focus of the first cycle's assessment was, therefore, to develop a general understanding of if and how the program achieved its goal. The first cycle's assessment was positive.

In spite of innumerable "rough edges," it was agreed that the concept of summer career awareness/exploratory sessions for the 14-15 year-old group was sound.

Process Evaluation of the Model: Second Cycle

As the PS/SD team began seriously to consider the long-term utility of the project and the transferability of the rotational career awareness concept to other projects, the need to fine-tune the total program process was recognized.

It was agreed that an adequate lead-time for project planning modification and assessment design had to be provided and that suggestions for program modification should be solicited from a broader range of education and employment and training personnel.

The range of assessment instruments and indicators included:

Quantitative

- Number of Vocational Clusters attended by each participant
- Average number of hours spent by each participant in each vocational cluster
- Range of hours attended by the 120 participants
- Number of youth enrolled at the end of the project
- Analysis of participant characteristics.
- Pre/Post Testing
- Participant data Cross-tabulation (to check for sex and race bias)

Qualitative

- Team Leader Summary Reports
- Instructor Reports
- Debriefing Sessions
- Project Coordinator Reports
- Counselor Recommendations
- Participant Interviews
- Work Experience Coordinator Interviews

Outcome Assessment Efforts (Evaluation of Participant Benefits at Program Termination/Impact Evaluation of the Effect on the Youth Community)

To date, outcome evaluations of the project have been limited to very simple, non-experimental indications of participant change at program termination and follow-up.

Participant pre-post tests measured career information/awareness gains. Participants were polled to determine if project participation encouraged enrollment in high school vocational/technical courses. A six-month follow-up of participants was conducted to determine how many youth had actually enrolled in vocationally oriented courses upon returning to school in the Fall.

Although it is normally very difficult to substantiate the impact of a specific project on the youth community, institutional change gradually occurred; the community college setting is now recognized by the prime sponsor, school district, and community college network as a valuable and viable resource to provide services for I/S disadvantaged youth. Moreover, the rotational career exploratory concept was incorporated in the design of a year-round YEDPA knowledge development project: The University of Oregon Medical Careers Exploration Project. The University complex is now engaged in providing career exploratory services to I/S and O/S youth.

CHAPTER III

EVALUATIVE RESEARCH AS A KNOWLEDGE DEVELOPMENT TOOL

CHAPTER 3

EVALUATIVE RESEARCH AS A KNOWLEDGE DEVELOPMENT TOOL

Program evaluation research is concerned with systematically finding out how well social action programs such as YEDPA work. The basic logic of program evaluation research evolved in part to address specific questions concerning social program development.

It is useful to make a distinction between "evaluation" and "evaluation research." "Evaluation" is used in general sense to refer to the social process of making judgments of worth. It is a process which is basic to most forms of social behavior, whether that of a single individual or of a complex organization. Usually an evaluation implies a logical or rational basis for making a judgment, but it does not necessarily involve the use of a systematic procedure for bringing together and presenting objective evidence to support the judgment. Thus, the term "evaluation," in its common sense, refers simply to the general process of assessment or appraisal.

"Evaluation research," on the other hand, refers to the use of social science research methods and techniques for the purpose of making an evaluation. Thus, "evaluation" becomes an adjective specifying a type of research, and the main emphasis is placed on the noun "research." So, evaluation (or "evaluative") research refers to procedures for collecting, analyzing, and utilizing information which increases the possibility of proving rather than asserting the worth of a youth program. A great deal of variation in the techniques and subjects of focus is possible within program evaluation research. For example, although much evaluative research focuses on outcomes or results, evaluations can also be directed toward program goals and objectives, plans or designs

for carrying out the goals, or program activities and processes. As will be shown, the wide range of evaluation methodology allows for adaptability to types and stages of youth program development, resources available, and other unique local requirements. Despite this methodological range, a basic framework, or model, of the evaluation process can be described. In the following two sections, this logical process is introduced, then integrated and illustrated in the broader context of the knowledge development model introduced in Chapter 1.

Program Evaluation Research: A Developmental Sketch

The earliest program evaluation approach emerged from the education field. This approach was typically concerned with narrowly determining the degree to which program objectives were achieved. The rationale was that programs should be evaluated by comparing the attainment of objectives, usually involving participant performance, with clearly specified behavioral outcomes established for the program. From such a process, it could be determined if the program was achieving its goals. If it was not, program modifications could be made*. This early approach has been extremely influential in contemporary social program evaluations.

This approach also has several implications for what program directors and staff must know and do. The most important of these is the need for clarity and consensus on agency and program goals, on methods of assessing participant outcomes, and on what constitutes acceptable or desirable participant outcomes.

Much of current good practice in program evaluation simply expands on this methodology. Perhaps the most important development is the increased concern for process

*This is basically R. Tyler's "Goal Attainment Model," first described in 1949.

assessment in the overall evaluation of a particular program. Process evaluative research assesses the quality of a program during its implementation, and has grown to be seen as particularly important during the formative early and intermediate stages of a program. One of the principal roles of process evaluative research during this formative period is to help discover problems, limitations, and successes in the workings of the program and its implementation.

Outcome/Impact evaluation is more terminal in nature and is aimed at determining the value of the completely developed program - usually in terms of program-related changes in program participants. A complete developmental cycle of program evaluation ideally synthesizes both types of evaluation.

Reflecting the evolution of approach touched upon above, many contemporary program evaluators now subscribe to a 4-level evaluative process which associates a set of evaluation types with a parallel set of needs for planning decisions*.

Four planning categories may be identified:

1. Planning decisions - to set goals and objectives
2. Programming decisions - to design program operations
3. Implementing decisions - to monitor, evaluate, and improve program activities
4. Recycling decisions - to judge, learn from, and react to outcomes of the program (continue, modify, or terminate)

For each class of decisions, a parallel type of evaluative research activity can be identified:

*The following discussion draws from Daniel Stufflebeam (1971).

1. Context Evaluation provides the basis for determining goals and objectives.

   a. Isolate the problems, needs, and unmet opportunities the program can address.

   b. Search outside the immediate system to locate useful values, needs, and approaches.

      - o Explore research findings
      - o Visit other programs
      - o Assess community priorities

   c. Examine existing program(s): What are the policies, the organizations, and the goals? Are goals being achieved as intended?

   d. Should goals be changed or expanded?

2. Input Evaluation provides the basis for selecting program activities to meet goals and objectives. How are the objectives best achieved?

   a. Identify alternative strategies.

   b. Determine the limitations and advantages of each.

   c. Identify the likely effects and side effects of each approach.

   d. Determine what is required to administer and monitor each approach.

3. Process Evaluation provides feedback about program activities. It has three major functions:

   a. Detect or predict problems.

   b. Provide informational needs for management/staff decisions.

   c. Record the procedures.

   Information is obtained and reported as often as the program staff requires it.

4. Product Evaluation provides a measure and interpretation of achievements as often as necessary. This form of evaluative research is similar to that identified earlier as outcome/impact evaluative research. However, product evaluation may also assess intermediate attainments within the program.

In summary, this approach is designed to assist the decision-maker at all steps of program management. Thus, evaluative research is the process of determining the kinds of decisions to be made and lessons to be learned, then selecting, collecting, and interpreting the needed information in making these decisions and learning these lessons.

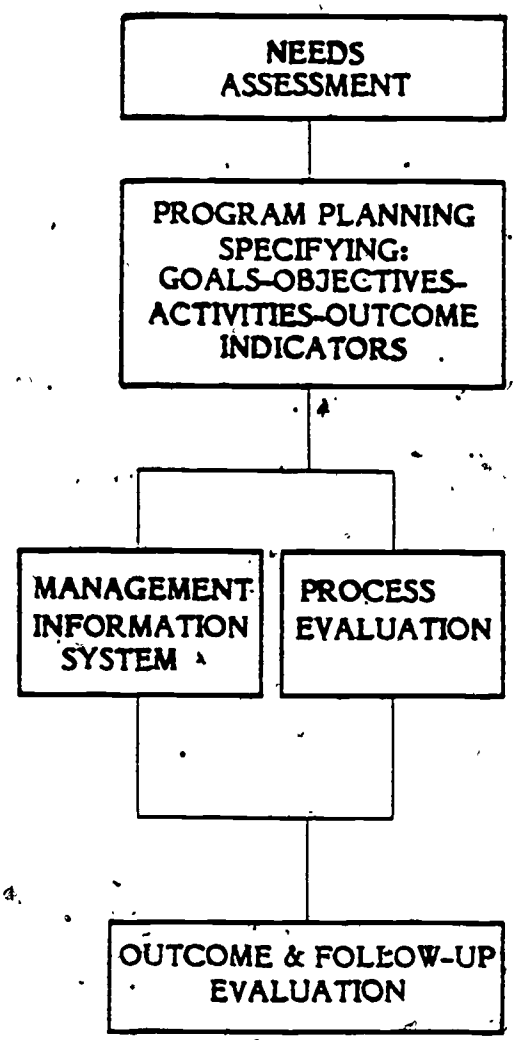
Five evaluative research phases, shown in Fig. 3-1, provide a simple framework for the decision-making, lesson learning process.

Applying An Evaluative Research Framework to the Knowledge Development Process

The principal reason for introducing a "state of the art" framework of contemporary evaluative research is that the logic of this framework can easily be adapted to fit neatly into the original model of the local KD process introduced in Chapter 1.

This adaptation is made clearer and more workable by taking an intermediate step, whereby the evaluative research framework (Fig. 3-1) is restated as a flow of decisions and activities. This restatement is shown as Fig. 3-2, which contains all of the original framework elements except the "Needs Assessment" block. The reason for this omission is that, within the KD model (Figure 1-2), we have already concerned ourselves with a need/policy assessment earlier in the program development cycle.

A key feature of the evaluative research model (Fig. 3-2), which we are now inserting into the overall KD process, is that we may work our way through the logical flow in several different ways. This flexibility will meet our earlier criterion of allowing the suitable adaptation of evaluation approach (methodology, type of data, study design, data analysis techniques, etc.) for each stage of youth program development.



Needs Assessment involves stating the objectives. This information is used to identify program needs.

In program planning, evaluative research can provide the project director with tools to help make planning decisions. It can also build procedures into the program, that will be needed assess whether or not the program is operating as planned and how well it is achieving its objectives.

A Management Information System is essential to the monitoring process and to determine the extent to which the elements of the program are being implemented as planned.

Process evaluative research provides information about the activities and interactions of the program's components in meeting program objectives. This information is used to make modifications where necessary.

Outcome and Impact Evaluative Research provide information about the success of the entire program. This information can support a decision to maintain, modify, expand, or discontinue the program.

FIGURE 3-1: AN EVALUATIVE RESEARCH FRAMEWORK

(Adapted from a model developed by the UCLA Center of Evaluation. See Morris and Fitz-Gibbon (1978).)

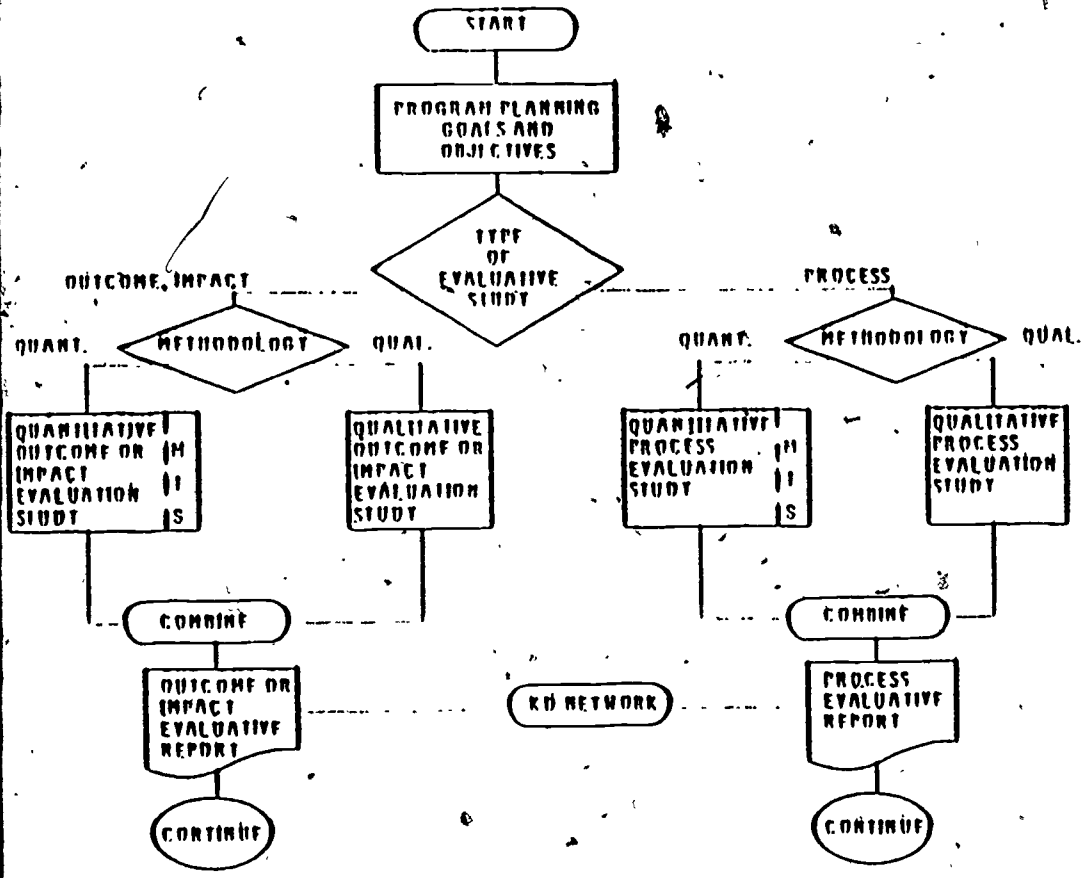


FIGURE 3.2: AN EVALUATIVE RESEARCH MODEL

Let's see how our evaluative research model works when we consider how best to assess and learn from a LEA-private sector approach. Assume that, within the broader KD process, we have already:

(a) assessed currently offered youth programs,

(b) identified additional unmet youth needs,

(c) tentatively identified a KD focus area, and

(d) determined the proper "learning level," based on how much we know about the KD focus area. We have a new LEA-private sector program model to try out, and are at learning level 2.

Now we are ready to demonstrate the model and, at the same time, analyze what happened during our demonstration. At this point in the overall KD model, we enter the logic of the evaluative research model (Fig. 3-2). Notice that we could have entered the evaluative research model from any of a number of other learning levels; but, had we done so, it is most likely that we would work our way through the logical flow in a different fashion than exhibited here, where we:

Needs Assessment involves stating the objectives. This information is used to identify program needs.

1. Plan the model demonstration, being certain to articulate our goals and objectives clearly. Clear delineation of program goals is crucial to good program evaluation.

2. Decide on the most appropriate evaluative research approach suggested by our goals and objectives. At this rather exploratory level, we might well decide that

our LEA-private sector link approach is best examined via a process evaluation, since at this early stage, we are most likely to be interested in capturing a sense of the major characteristics of the new linkage's implementation.

3. Next we will decide what blend of methods to use within the process evaluative research approach. At this early stage it is likely that many of the questions we have about our new LEA-private sector linkage idea may best be answered by using qualitative methods. Thus, techniques such as intensive interviewing may be used to explore key questions and then verify their relevancy. For example, what are the various "agendas" of LEA and private sector personnel? Did program participants enjoy the experience? What unanticipated problems or benefits were associated with the demonstration? And so on. Of course, at the very least, our monitoring system will also collect certain bottom line quantitative data on youth participant characteristics and services delivered within the program segment affected by our new model. This, and perhaps other quantitative information, will allow us to report later on the delivery of the actual "service units" that occurred during the demonstration: for example, the number of conferences held between LEA and private sector personnel, the number of private sector work exposure situations available to youth participants, as well as participation rates, costs, and so on.

4. We would then prepare a final evaluative report (and perhaps a brief interim report or two) combining quantitative and qualitative findings. This report serves to document at least the highlights of what we have actually done in implementing our new linkage idea, and what were some of the effects and reactions associated with our new approach. At this point, we leave the logic of the evaluative research model and return to that of the broader KD model.

5. The final evaluative report becomes part of the decision and policy making process of the local jurisdiction. In addition, the result of our demonstration becomes available to others interested in KD. If the results of our evaluation are not utilized, there is little reason to perform the evaluation in the first place.

6. Depending on policy makers' decisions, we may next decide to modify the model and perform further, more detailed, and still predominantly process-oriented evaluations (learning levels 3 and 4 on the KD Flowchart). Or, if the initial demonstration was judged completely unsatisfactory to meet our needs, we may alter our idea or discard it altogether and look for another program approach to demonstrate.

As mentioned, different pathways through the evaluative model will be appropriate at different learning levels of the KD framework. Generally, in learning levels 6-8 we will tip the methods balance in favor of quantitatively oriented outcome evaluations, which may involve experimental designs using control or comparison groups. However, in such a case, some qualitative material will continue to be desirable to serve as in interpretive background for understanding quantitative results.

It is important to note that as we proceed along the learning levels of the KD Model, we accumulate information about the program approach we wish to locally implement or continue to modify. Indeed, it is the continuous accumulation of information which enables us to progress along the spectrum of learning levels. Of course, more readily available and generalizable findings from youth programs elsewhere, can greatly assist us in this learning journey.

The remaining sections of this chapter highlight some of the more specific principles

and procedures of the evaluative model as it applies to the youth program knowledge development process.

Comments on the Techniques of Evaluative Research

We have examined the general strategy of knowledge development and inspected the role played by the logic of evaluative research in KD. It now seems appropriate to offer further insight into some of the specific techniques of evaluative research. Space is limited, and for detailed procedures the reader is referred to Mangum et al. (1976), Sum et al. (1978), and Morris and Fitz-Gibbon (1979). The following section emphasizes goal analysis, discusses the balance of qualitative and quantitative methods in youth program evaluation, and offers some useful rules of thumb in research design, data collection/analysis, and documentation for youth program evaluation.

Goal Analysis

Clarifying goals enables us to establish a common understanding about what it is we want a program to achieve and then to determine how and if the program is achieving it. In program planning, operations, and assessment, goal analysis plays an initial role. In large part this is because of the systematic thought process goal analysis necessarily subjects us to as individuals and, even more importantly, as a group of individuals with different perceptions about the many aspects of youth programming.

From an assessment standpoint, we can be assured that if we reach no basic consensus about program goals prior to operating a program, no consensus is likely to exist by the end of the program -- particularly if the program had problems. Thus, from a learning, knowledge development standpoint, it is crucial that operations, planning, and management be involved in ascertaining what it is that we are going to do in the program and

what it is that we wish to learn from the program. Although additional program actions and learnings may occur, we will have a bottom line agreement against which to judge and orient ourselves, both during and at the completion of the program cycle.

Techniques of Goal Analysis

Goal analysis is the systematic process of moving from the general to the increasingly specific.* At each step, there occurs a further honing and refinement of the sub-elements of the original goal. Deal with goal analysis as you would the writing of a report: first drafts are for getting down, not for getting good. Goal analysis eventually, lead to polished statements which, in addition to assessment purposes, are also suitable for grant applications and public consumption.

Five basic steps comprise goal analysis:

1. Establish the goal. Use whatever words are comfortable, though they may be fuzzy and broad. The idea is to "get it down," to get started in the overall process. Additionally, it will be easier to achieve an initial consensus on the importance of more vaguely stated intentions.

   Check to make sure the goal describes an outcome rather than a process, so you don't get stuck with the problem of means and ends at the very start. For example, make the goal "understand..." rather than "develop an understanding of..."

*The approach to goal analysis discussed here is that of Robert F. Mager (1972).

2. Jot down actions that define the goal. Use words and phrases, making no attempt to keep things tidy. Don't try to write objectives - that's for later. Two strategies may help you to describe the meaning of the goal:

a) use the word "by" after the goal. For example:

GOAL: Increase youth participant services

BY

1. Training staff in youth counseling
2. Contacting schools and juvenile agencies to identify potential participants
3. Expanding facilities
4. Planning new intake procedures

As you try to think of actions to reach the goal,

b) Consider whichever of the following seems most helpful:

1. Answer the question, "What would I take as evidence for the achievement of the goal?"
2. Imagine someone else with the responsibility of defining the goal. How would that person recognize the goal's attainment?

3. Go back over your list of actions and tidy it up. Eliminate duplications and items that, upon reconsideration, are not what you want to say. Check for abstractions (fuzzies), which can be either discarded or analyzed further. You may find making reference to a list of more precise verbs helpful in formulating concrete statements. (See Table 3-1).

The following statements illustrate the distinction between "fuzzies" and

"concretes".

FUZZIES	CONCRETES
1. Be a good counselor	1. Name ten counseling competencies
2. Defend confidentiality	2. Train staff
3. Appreciate other people	3. Smile when you say hello
4. Understand participants	4. Identify fuzzies

Each of the "concretes" is an action. Naming, reciting, selecting, smiling, and identifying are all actions. The "fuzzies," however, are fuzzy because they are abstractions rather than actions. "Being a good counselor" does not tell what the individual is doing when s/he is being a good counselor. The same is true for "defending confidentiality"; how is the individual defining confidentiality?

4. Write a complete statement for each action. Note the manner and/or extent of accomplishment that you would insist be achieved before agreeing that the goal had been attained.

This complete statement will become an objective. Fully developed objectives contain the following features:

a. Action - A good objective always states what is expected to be done.

b. Conditions - A good objective always describes the important conditions (if any) under which the action is to occur.

TABLE 3-1: A categorized "shopping-list" of verbs useful for making objectives more precise

SIMPLE TASKS

attend
choose
collect
complete
copy
count
define
describe
designate
detect
differentiate
discriminate
distinguish
distribute
duplicate
find
identify
imitate
indicate
isolate
label
list
mark
match
name
note
omit
order
place
point
provide
recall
repeat
select
state
tally
tell
underline

STUDY SKILLS

arrange
attempt
categorize
chart
cite
circle
classify
compile
consider
diagram
document
find
follow
formulate
gather
include
itemize
locate
map
organize
quote
record
relate
return
search
signify
sort
suggest
support
underline
volunteer

ANALYSIS

analyze
appraise
combine
compare
conclude
contrast
criticize
deduce
define
evaluate
explain
formulate
generate
induce
infer
paraphrase
plan
present
save
shorten
structure
switch

SYNTHESIS SKILLS

alter
change
design
develop
discover
expand
extend
generalize
modify
paraphrase
predict
propose
questions
rearrange
recombine
reconstruct
regroup
rename
reorganize
reorder
rephrase
restate
restructure
retell
rewrite
signify
simplify
synthesize
systemize

GENERAL APPLICATIONS

Arts & Crafts

assemble
blend
build
brush
carve
color
construct
crush
cut
dab
dot
draw
drill
finish
fit
fix
fold
form
frame
grind
hammer
handle
heat
illustrate
make
men
mend
mix
mold
nail
point
paste
pate
position
pour
press
procedure
roll
rub
sand
saw
sculpt
sew
snake
sharpen
sketch
smooth
stamp
stick
stir
trace
trim
varnish
wipe
wrap

Drama

act
clasp
correct
dress
direct
display
enter
exit
express
leave
move
pantomime
pass
perform
proceed
respond
show
start
turn

Language

abbreviate
accent
alphabetize
argue
articulate
capitalize
edit
hyphenate
indent
outline
print
pronounce
punctuate
read
recite
speak
spell
state
summarize
syllabicate
translate
type
verbalize
write

Mathematical

add
bisect
calculate
check
compound
count
derive
divide
estimate
extrapolate
extract
graph
group
integrate
interpolate
measure
multiply
number
plot
prove
reduce
solve
square
subtract
tabulate
tally
verify

Music

blow
bow
clap
compose
conduct
finger
harmonize
hum
mute
play
pluck
practice
sing
strum
tap
whistle

Physical

arch
bat
bend
carry
catch
chase
climb
coach
coordinate
critique
float
grip
let
hop
jump
kick
knock
lift
march
perform
pitch
run
score
skate
ski
skip
somersault
stand
stretch
strike
swim
swing
throw
toss

Science

calibrate
compound
connect
convert
decrease
demonstrate
dissect
graft
grow
increase
insert
lengthen
light
limit
manipulate
nurture
operate
plant
prepare
reduce
remove
replace
report
reset
set
specify
straighten
time
transfer
weigh

Social

accept
agree
aid
allow
answer
buy
communicate
compliment
contribute
cooperate
disagree
discuss
excuse
forgive
greet
guide
help
inform
interact
invite
join
laugh
lend
meet
offer
participate
permit
praise
react
relate
serve
share
smile
supply
talk
thank
volunteer
vote

c. Criterion - Whenever possible, a good objective describes the criterion necessary for the objective to be considered completed.

For example: Client services are considered to be increased when the program demonstrates it has been able to:

1. Train two new counselors by June.

2. Plan new intake procedures, which will fulfill federal guidelines and are considered acceptable to a test group of participants.

3. Increase the client caseload 50% by June.

4. Expand facilities, provided funding is obtainable, for 25% increased program usage.

5. Identify participant populations not previously served, which match the results of an independent research survey.

5. Finally, modify these statements until you can answer yes to the test question: "If something was achieved according to these statements, would I be willing to say the goal has been accomplished?" When you can answer yes, the goal analysis is complete.

Goal analysis is an important part of evaluative research regardless of the KD learning level. As is to be expected, the specific learning level will strongly influence the nature of the goals we produce. For example, the goal statements of an initial

program demonstration will be quite general, while the refined goal statements of a participant outcomes study might actually take the form of a research hypothesis. The main point here is that well-written goals and objectives should point the way to the types of procedures most appropriate for evaluating the program. This amounts to saying that problem statements and solutions should be appropriately matched.

Quantitative and Qualitative Methodology in Evaluative Research

In evaluative research, the process of "problem solution" or "types of procedures" used is called the "methodology." Regardless of the specific methodology chosen, several basic elements should be present:

1. Selecting the basic evaluative approach based on the KD learning level, the type of questions asked, the nature of program goals, and who the users of the research findings are likely to be.
2. Developing the evaluative research design.
3. Collecting materials and data about program events and participants as called for in the research design.
4. Analyzing and interpreting the findings.
5. Presenting and interpreting study results.

In deciding what sort of methodological approach to use, it is important to realize that an almost organic interconnectedness exists between the nature of the knowledge development question itself, the method used for obtaining information about the KD question, and the data collected according to procedures outlined within the methodology. These three elements interrelate in a systematic way, such that a change in one of the three necessitates a change in the other two.

A poor choice of KD methodology can severely limit the kinds of questions we might ask and the types of problems studied. Thus, according to the unique local needs and

circumstanaces of youth programs, we should select a research approach which is based on the unique characteristics and goals of local programs, not an automatic evaluation approach using standardized criteria applied across the board. The task, then, is to combine the validity of the question with the validity of the answer.

For example, if a question has to do with determining which one of two youth work configurations caused specific changes in the youth participants, a precise answer to this outcome evaluation research question will most likely call for a rather precise methodology, possibly involving an experimental research design utilizing a comparison or control group. Data collected within this method would typically be quantitative data --that is, numerical results based on test results, questionnaire responses, or some other sort of quantitatively measurable response. On the other hand, if the question deals with the nature of participant characteristics and reactions in a demonstration program, our choice of method might involve intensive interviewing, participant observation, or some other such qualitative methodological approach.* In this case, the resulting data from our qualitative methodological approach would tend to be more narrative and less numerical in nature.

Likewise, the way in which data is analyzed may differ considerably from problem to problem and methodology to methodology. Using quantitative approaches, for example, we typically become involved in measures of statistical description and statistical inference. However, in the analysis of qualitative data, we seek to establish themes and patterns based upon the unfolding results of interviews and other material collection procedures.

*For detailed discussion of qualitative methodology see: Patton (1980); Bogdan and Taylor (1975); Lofland (1971); Cook and Reichardt (1979).

It is important to realize that a range of methodological approaches to KD exist. Currently, the dominant evaluative research approach, accepted almost without question by many youth planners and evaluators, involves the use of a natural science based, deductive, hypothesis-oriented methodology, which involves quantitative measurement, experimental design, and presumes statistical analysis to be the epitome of "good" procedure. In contrast, the alternative (qualitative) end of the methodological scale is derived from the tradition of anthropological field study.

The qualitative approach is inductive and holistic; it aims at understanding program phenomena through the use of qualitative data, holistic analysis, and detailed description derived from close contact with program participants. Although the qualitative approach is sometimes erroneously regarded as being "soft," "fuzzy," and generally less desirable than a "harder" quantitative approach, a more reasonable position is simply that different kinds of problems (i.e., KD learning levels) require different types of methodological research approaches. No position on the methodological spectrum is intrinsically better than another. Rather, these are alternatives from which the we can choose the solution which best matches our particular research problem.

It is often said that the distinction between qualitative and quantitative approaches is that of "knowing" something, as opposed to merely "knowing about" something. This suggests that qualitative approaches, by which one means those research strategies which involve participant observation, in-depth interviewing, fieldwork, and so on, allow the researcher to obtain first hand knowledge about the youth employment and training programs in question. Qualitative data collection strategies, then, are aimed at describing and understanding the holistic nature of the program component from the participants' points of view.

Using a quantitative approach to youth program learning involves an attempt to establish reliable generalizations about the frequencies of program events and about associations among these events. By using a qualitative approach, we can acquire a systematic overview of the tissue and fabric of program activities, events, or settings. It can sometimes be argued that a strongly quantitative approach may cause us to draw our attention away from the major features of the ongoing setting itself. We can trap ourselves into an exclusive concern with very small problems simply because these problems are subject to quantification. On the other hand, a quantitative approach is necessary to provide more conclusive answers to highly specific questions about program operations. Because of the rigor and control necessary for many quantitative evaluative research approaches, the detailed view of the quantitative researcher may be compared to that of a viewer with a small magnifying glass. The qualitative researcher, however, has a macroscopic though less detailed, view of the total context of the program under consideration. Thus, three important areas of distinction emerge when the two techniques are compared:

1. The scale or scope of program operations which may be identified and studied;
2. The perspective of the analyst (the "insider's" view of the qualitative analyst vs. the "outsider's" view of the quantitative analyst);
3. The methods and data of the two approaches.

How do we decide which approach to use? When our research focuses on program or participant characteristics, we may well choose a predominatly qualitative approach. On the other hand, if our focus is more concerned with the establishment of causes or consequences, we may be predominantly interested in a more quantitative approach. For example, in process evaluations of experimental or demonstration youth programs,

a more qualitative approach is often appropriate. Here the argument is that not enough is yet known about the programmatic approach, selection of target youth communities, and delivery methods to appropriately apply highly specific quantitative approaches to evaluate the program. The more macroscopic approach of qualitative procedures may be much more in order.

For outcome or impact evaluations of youth programs which may have been established in a prime sponsorship for a longer period of time and about which a considerable amount of information about program delivery methods, problems, etc., is already known, quantitative approaches to answering very specific questions may be most appropriate.

Usually, some balance of qualitative and quantitative methods should be incorporated throughout the course of an evaluation. Each method can provide a cross check on the other. Ideally, evaluative research should tap multiple perspectives through the use of multiple research methods in order to capture the most comprehensive view of the youth program. Thus, qualitative methods can provide the context within which the quantitative findings can be interpreted and understood. It is quite common to obtain program evaluation results that don't fit with what was expected. Wondering about rival explanations of outcomes can become very frustrating when there is a lack of contextual understanding which surrounds the quantitative assessment. What could have precipitated such puzzling quantitative results? Was the measurement instrument okay? Did the questions asked correctly tap the area being evaluated? Did the youth participants percieve these questions in a different manner than was anticipated? Such questions can go on and on, and often do; qualitative data that can provide the framework for comprehending the quantitative portion of the evaluative findings can often provide answers about the larger context. In short, qualitative methods often provide the basis for understanding the significance of statistical associations.

Notes on Selecting an Evaluative Research Design

Most simply stated, a "research design" is a plan which states how, by whom, when, and from whom measurements will be gathered while conducting a knowledge development project. The initial and most obvious reason for using an evaluative research design is to insure a well-organized study, with all the right people taking part in the evaluative research at the right times. A good design, however, provides us with something more useful than just keeping the collection of data on schedule. Most basically, it is a way of gathering comparative information about program elements or participants or some other set of variables so that results from the program being evaluated can be placed in a context that will enable us to judge the program's worth.

In selecting a specific research evaluation design, the KD analyst should ideally consider a number of factors, such as the reliability and validity of outcomes, the trade-offs in reliability and vailidity which must be made due to limited time and resources, the specific nature of the youth program or programs being studied, etc. Perhaps one of the most important criteria in the selection of a study design, however, is the "face validity" of the research design and of the instruments used within the research design. Face validity concerns the extent to which an entire study or an individual measurement instrument looks as if it measures what it is intended to measure. A research design and the instruments used within it have face validity if youth program decision-makers and information-users can look at the design and the items measured by the instruments, and understand what is being measured.

For example, if key youth program decision-makers and information-users have a chance to review the items on a questionnaire to be used in our knowledge development study, as well listen to an explanation about what the questionnaire items were supposed to indicate, they may then be asked: "If we administer these

questionnaires with these items measuring these factors, will that tell us what we want to know? Does this approach make sense? Would we believe the results if they came out negative?! It is difficult to get decision-makers and information-users to look at designs and instrumentation carefully in advance. But the more this sort of review takes place, the greater the insurance that the study results will be accepted as being reasonable by the decision-makers and information-users and actually be utilized. Thus, face validity is extremely important in research design and subsequent data analysis, data interpretation, and data utulization.

As with the face validity of research instruments and the credibility of the research design, so, too, consensus on the relevance of research definitions and the units of analysis are also factors that affect the credibility and usefulness of KD evaluation data. Furthermore, actively involving information-users in making decisions about these issues means more than a one-point-in-time approval of a KD research proposal. Ideally, decision-makers and information-users should be involved in all KD research decisions as they occur. Typically, there will be a slippage between the methods as originally proposed and the methods as actually implemented in the KD study. If decision-makers and information-users are involved only at the stage of approving research proposals, they are likely to be surprised when they see a final report. Thus, the making of decisions about research methods is a continuous process that ideally involves checking out changes as they are made.

The research design of a KD study will vary considerably depending on whether a quantitative or qualitative approach to analyzing the youth program is used. Quantitative design approaches involve the specific determination of research interests, goals, data collection procedures, and hypotheses well in advance of actually conducting the study. Qualitative research studies tend to remain quite flexible from the beginning and well into the research. Although qualitative researchers have a methodology to follow, the specifics of their approach evolve as they proceed.

KD projects may be quantitatively studied in very simple but effective ways, as well as in more complex and powerful ways:

1. Descriptive evaluation research is concerned mostly with "what is" and "how much" and involves the use of descriptive statistics (e.g., frequency distributions, measures of central tendency, measures of dispersion) to describe the framework or characteristics of the youth program population and environment. It is necessary to establish a conceptual frame of reference, e.g., the particular new component being studied and its relationship to other youth offerings. Workable definitions of measures to be used must also be agreed upon -- an exercise which should be eased by the presence of well-written goals and objectives.

   At the developmental stage of a KD project, it will probably be appropriate to devote the most energy to descriptive strategies before moving to the next stages of quantitative study. Thus, the descriptive approach will be especially appropriate at the earlier learning levels of the KD model.

2. The correlational or comparative level of evaluation is concerned with relationships among measures developed at the descriptive level. For example, we may determine that work groups comprised of mixed income participants do, indeed, seem to compare or correlate with higher levels of performance (or attitudinal change, etc.) than do work groups comprised only of disadvantaged youth.

   Such critical examination of relationships among measures describing a youth program may provide valuable insights into what goes on in the program. These insights may then raise meaningful questions, which can be answered by subsequent experimental studies.

3. The experimental approach to quantitative evaluation research generally requires an experimental design in which experimental and control groups are compared, and to which program participants have been randomly assigned. The change in some outcome variable of interest (such as reading improvement or completion rates) is contrasted between experimental and control groups.

   Experimental designs are often incorrectly assumed to be the best or even the only really acceptable type of evaluation methodology. It is true that questions about program effectiveness (e.g., at learning levels 6-8 in the KD model) are often best answered by experimental designs. Descriptive and correlational approaches may certainly be utilized in such analysis, though less conclusive outcomes will result.

In contrast with quantitative design methodology, qualitative research approaches involve a gradual unfolding of the specifics as they procede. Challenging research design decisions, which must occur at the outset of the quantitative approach, occur

later in the qualitative approach. Though different in nature from quantitative design, the discovery and creation of the design within the qualitative approach can be equally challenging.

A major methodological consequence of the qualitative study of people in a given location is the process of discovery. Of necessity, it is a process of learning what is happening. Since a major part of what is happening is provided by people in their own terms, we must find out about those terms rather than impose a preconceived or outsider's scheme. It is our, the observers', task to find out what is fundamental or essential to the people or enviornment in the youth program under observation.

The same range of design types that exist in quantitative research (descriptive, correlational, experimental) can occur in qualitative research approaches. The real strength of qualitative methodology lies in its facilitation of discovery. Although conjecture regarding causes and consequences of program events may emerge from qualitative research, the principal focus of this approach will usually be upon describing the characteristics of program events and participants.

Nonetheless, qualitative approaches may be incorporated into, for example, an experimental study design. The forthcoming qualitative results would not be statistically testable as in the case of quantitative results, but the breadth, comprehensiveness, and sensitivity of the qualitative results might well offset this consideration. Ideally, an experimental research approach would include both a quantitative and a qualitative dimension. The two approaches can complement one another in a very desirable way.

In qualitative program analysis, we will, of course, have some general questions in

mind when we begin our research. These typically fall into one of two broad categories.

1. The first category includes questions related to specific substantive issues in a specific program setting. For example, in studying a central youth employment center, one might examine how youth participants view the physical and/or social environment of that center.

2. The second category of interest involves asking questions about topics, such as the nature of a certain kind of organization or the dynamics of small groups. Thus, for example, a youth participant's experience interacting with fellow workers in a community home improvement work team might be examined.

It may be helpful to consider different categories which the qualitative researcher can examine. Ranging from the small scale to the large scale, one qualitative methodologist has recommended the following spectrum:*

1. ACTS. Action in a situation that is temporary and brief, consuming only a few minutes or hours.

2. ACTIVITIES. Action in a setting of some duration: days, weeks, months, constituting significant elements of persons' involvements.

3. MEANINGS. The verbal products of participants that define and direct action.

4. PARTICIPATION. Participant's total involvement with or adaptation to a situation or setting under study.

5. RELATIONSHIPS. Interrelationships among several persons considered simultaneously within the program.

*Lofland (1971).

6. SETTINGS. The entire setting of a program under study, conceived here as the unit of analysis.

Further, we may consider within each of these six scale units either a static depiction of the category under study or phases (or sequences) through which the category being studied passes over the course of time. This is somewhat like the difference between a photograph and a motion picture.

What distinguishes qualitative methods from other methodologies is that the qualitative researcher's questions are framed in general terms. Therefore, most users of the methodology try to begin a study without specific hypotheses or preconceived notions. To enter a setting with a set of specific hypotheses is to impose preconditions and perhaps misconceptions on the setting.

During the first days of a qualitative study, we may find that our ideas and areas of interest do not fit the program setting. Our questions may not be relevant to the concerns and behavior of the participants. We will then begin to formulate a new research design or new tactics and begin to ask different questions.*

Notes on Data Collection Procedures

Once the basic approach of a knowledge development project has been determined and a research design chosen, data must then be collected. Data collection is sometimes considered to be a dirty job in program evaluation (or in any type of analysis for that

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*An excellent example of qualitative research in CETA youth programs is Bonnie Snedeker's Getting There, a monograph published by the U.S. Department of Labor in 1980. A procursor to this study was included as part of course training materials in the Knowledge Development Workshop series sponsored by the Office of Youth Programs.

matter). For both the qualitative and quantitative approaches, the collection of data probably consumes the greatest amount of time and effort in the evaluative project.

It is important that we purposefully decide what to measure. We could, in a youth employment and training program, decide to measure an infinite number of things: smiles per second, time scheduled for counseling, types of job placements, number of participants bringing extra materials to classroom activities, self-concept, etc. "To measure" is used here in its broadest sense-to record in order to summarize and report. Clearly, we must maintain an intelligent selectivity so that we can concentrate on data items of demonstrable value.

Conducting a KD evaluation is a matter of gathering evidence to demonstrate the attributes and effects of the program or one of its subcomponents. The program's learning level position on the KD model, program goals, and the nature of our audience will help us make gross decisions about what program variables to look at. For example, we might measure some mix of:

a. Characteristics of the program context or environment (e.g., program organization, time frame, physical environment, class size, counseling style, etc.).

b. Participant characteristics (e.g., age, sex, socio-economic status, language ability, skill levels, attitudes, etc.)

c. Characteristics of program implementation (e.g., activities, interrelationships, administrative arrangements, principal materials, etc.)

d. Program outcomes Here, consideration of program goals and objectives is paramount. Be alert, however, to the results and types of outcomes totally unanticipated by planners.

Beyond such general guidelines, decisions about precisely what information to collect will be unique to each study situation. Every program has unique goals and generates unique kinds of data. Though there is no easy way to decide what data to collect or what variables to examine, here are some rules of thumb which may help:[1]

1. Focus data collection where you are most likely to uncover program effects, if any occur.

2. Try to collect a variety of information.

3. Try to think of clever (and credible) ways to detect achievement of program objectives (or other participant change).

4. Focus on the type of information you think members of your audience will look for when they receive your report.

5. Try to measure things that will enable you to further develop the youth program approach with which you are working, and that will advance local understanding of youth programming in general.

The process of collecting data is considerably different depending on whether we are using a qualitative or a quantitative design. For example, although interviews may be used in both types of research approaches, we will probably conduct the interview in a very different way, depending on the methodology we are using. As developed in quantitative research, the activity of interviewing has increasingly been narrowed to force a choice between rigidly formulated alternative answers attached to rigidly formulated questions. Here is an example:

[1]Morris and Fitz-Gibbon (1978), p. 20.

How interested are you in discovering new vocational opportunities? For instance, how often do you use your school's career resource center?

A. Very often

B. fairly often

C. not very often

An interview made up of such questions and utilizing pre-formed categories of answers is often called a "structured interview." This more rigidly structured data collection activity, so typical in quantitative studies, necessarily assumes knowledge of what the important questions are in the KD study and, more importantly, what the main kinds of answers to these questions can be. To the extent that we want to impose our questions on others and/or know what is happening with the people we are interviewing, this is a legitimate strategy. But to the extent that we do not want to make such an imposition, nor assume in advance that we already know a great deal about our respondents' lives, a different strategy of interviewing is required — a flexible strategy of discovery. Qualitative approaches to data collection are typically more open and flexible. An example of this is the "unstructured interview" in which the object is not to elicit choices between alternative answers to pre-formed questions, but instead, to elicit from the interviewee what the researcher considers are important questions relative to the KD project. Questions uncovered in this fashion may then ultimately provide the basis for a more structured interview or questionnaire.

Data for evaluative research can come from a great range of sources and be gathered by an arsenal of collection techniques. We are limited only by our ingenuity and imagination and, of course, time and money. Some possible data sources are:

1. Questionnaires
2. Interviews

3. Observation
4. Psychometric tests of values, attitudes, personality preferences, norms, beliefs
5. Rating by peers, staff, or experts
6. Existing plans, records, contracts, monitoring reports, MIS reports, and other statistics within our agency
7. Data collected by other agencies (for example, health records, employment security records, etc.)
8. Tests of information, interpretations, skills, application of knowledge
9. Projective tests
10. Diary or other personal records
11. Situational tests presenting the respondent with simulated life situations
12. Physical evidence
13. Documents (such as the minutes of board meetings, newspaper accounts of program actions, and so forth)
14. Correspondence

A lot of quantitative evaluative research depends on asking people for information. Such an approach relies on interviews and questionnaires to gather information about youth program participants — who they are, what it is they do in the program, and what their behaviors and attitudes are before and after participation in the particular program. Frequently the staff can be queried.

In educationally oriented KD programs, tests are commonly used; they can provide important data on knowledge and learning.

Sometimes we can find ways of collecting relevant data by "unobtrusive" methods that do not involve asking anybody anything. Thus, for example, the recorded number of

student visits to a career resource center over a period of weeks or months might be correlated with actions to encourage such behavior. Sometimes counselor records can be used for this. An excellent guide, full of imaginative examples and suggestions, is Eugene Webb's classic little book, Unobtrusive Measures. Observation can be a very important tool for collecting data on both pre-and post program indicators. To increase reliability, we should record observations immediately; if observations lend themselves to easy classifications, they should be coded on the spot.

Youth program records and other prime sponsor or subcontractor files are sometimes a very good source of evaluative data. Unfortunately, such records are rarely as useful as they should be. Often a prime sponsor's record keeping and its transfer of intake and service information to permanent records tends to be fairly haphazard. Records are often inaccurate, out of date, and the definitions and categories used by the prime may not be appropriate for youth program evaluation purposes. MIS reports can sometimes be very useful, though incompleteness and inaccuracies plague many MIS systems. Indeed, record keeping procedures are occasionally changed; and if this happens during the period under study, it can torpedo all attempts at before and after comparisons.

On the other hand, there are compensations for using the prime sponsor's or subcontractor's records. One is saving the money and time that collecting original data requires. Another is the advantage of continuity. Typically, the prime has been receiving a continual influx of information on the program. Prime sponsor record keeping or MIS systems may not be usable as is - we should check carefully for accuracy and completeness. We may also attempt to change certain standardized data collection procedures within our organization, or introduce new items more suited to knowledge development requirements.

Intensive interviewing and participant observation are the data collection procedures which are most common to qualitative program evaluation. Both of these approaches involve us in a more gradual unfolding of an outlook and understanding of the participants in a particular youth program.*

A Comment on Data Analysis and Interpretation

The nature and organization of the data collected within the research design usually dictates the level or complexity of data analysis which is appropriate in determining the results of the study. Considerably different analytical tools are used in the qualitative approach as opposed to the quantitative approach. Furthermore, within each of these approaches a wide range of possible analytical methods is possible.

The data analysis and interpretation phases of a knowledge development project are particularly critical in producing results which are likely to be well-received and utilized. It is at this stage that we look at the data and try to make sense out of it. It is important to separate analysis and evaluative interpretation. For example, in the case of quantitative analysis, we are involved with organizing the data, constructing appropriate statistical tables, and arranging for the data to be displayed in an orderly, usable format. On the other hand, interpretation involves making judgments about what these data mean, establishing the implications of the findings, and applying the results of our investigation to possible future action. By separating out analysis from interpretation, it is possible for a variety of users to look at the data analysis alone, come to their own conclusions, and make interpretations apart from the judgments of the original evaluator.

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*Two excellent guides to intensive interviewing, participant observation, and other qualitative research techniques are Lofland (1971), and Bogdan and Taylor (1975).

Some program evaluators strongly advocate the evaluator's responsibility to draw conclusions from data and make judgments about the evaluation results. Others argue that the evaluator's job is merely to support the data, and that the decision-maker must make the judgments. (In many local youth staffs, of course, the evaluator may also be a decision-maker). An ideal approach, which is a compromise between these positions, involves the early presentation of relatively raw results to decision-makers and information users, giving them an opportunity to study and react to the data analysis without the intrusion of the evaluator's interpretation. In this manner, the judgments and findings of key decision-makers and information users may become a part of our own later interpretation of the data. In this way, the process of local utilization of youth program learnings may get under way well before the final report is distributed.

Generally speaking, there are simply no hard and fast rules for interpreting the results of data analyses in youth program evaluation nor are there any rules for drawing conclusions from these results. If we have followed a well planned and relatively objective evaluation procedure, certain findings may lend themselves to obvious unarguable interpretations. However, other findings may fall into a less clear cut area where alternative and often divergent interpretations are possible. At this point, the experience of the analyst becomes very important. In many cases, we must rely on our personal knowledge of the specific program and components which are being evaluated and come to some conclusions. Ideally, we will confer with program personnel or "significant others" in order to clarify findings. In any case, we should always be able to justify and defend interpretations and conclusions on the basis of our data. In addition, it is important to resist having our findings distorted in order to "document" the preconceived notions of program or other personnel.

Three additional rules of thumb for analyzing and interpreting youth program

evaluation data include:

1. Clear, readable, and simplified statistical tables are necessary to enable decision-makers and information-users to understand and interpret the data. Sophisticated analyses should be reworded and presented in simplified and tabular form.

2. Data must be "worked with" in order to be really understood. We must spend some time getting inside the data. Busy information-users and decision-makers will be unwilling or unable to spend days at such a task, but a few hours of structured time spent by an analyst can pay off tremendously in a greater understanding of, and commitment to, the evaluation data.

3. Evaluators can learn a lot from decision makers' and information users' interpretations of the data by remaining open and listening to what people knowledgeable about the program have to say.

Documenting Knowledge Development Findings

A critical missing link in the youth program learning efforts of many local youth staffs is simply that of writing down a cogent description of the evaluative study and its results. Considerable credit and advantage may be foregone if this last step in methodology is overlooked or discarded. Although we distribute "problem" results more selectively, there also exists a real need among youth staffs to learn what appears not to work, as well as what appears to work well.

A glance at an outline of audiences interested in knowledge development findings should provide a sense of the value of placing study results into a distributable, discussable form:

1. Prime Sponsor (Staff and Advisory Bodies):

   CETA Prime Sponsor Administrators

   Program Planners/Evaluators

   Program Operators/In-House

   Counseling Staff

   Contractors (LEAs and other)

   Advisory Council

   City Council, County Commissioners

2. Regional:

   Regional Youth Coordinator

   Federal Representative

3. National:

   Office of Youth Programs

   Research/Evaluation Teams

4. CETA Prime Sponsors:

   Primes within the State network

   Primes within the National network

5. Public:

   Elected Officials

   Community-Based Organizations

   Special Interest Groups

   Press

   Private Sector Employers

   Unions

Here are ways that youth program learnings, if well-documented, can be used by each of these groups:

1. Prime Sponsor (Staff and Advisory Bodies)

   a. To assess the effectiveness of the youth program concept being tested in terms of its benefits to program participants and cost effectiveness.

   b. To inform administrators, program planners, program operators, and counselors of youth programming progress and outcomes.

   c. To present research project status reports to the Advisory Council.

   d. To present a comprehensive assessment of the learning effort to the Advisory Council.

e. To develop a substantive data base upon which to determine what works best for whom under what circumstances; to re-direct on-going and future youth programming.

f. To develop a substantive data base to use in determining which youth program projects to delete, modify, expand.

g. To help further refine our knowledge base re: modification of the overall delivery system that would result in better provisions of services to the client population.

h. To insure that KD assessment and evaluation data is utilized.

i. To provide a data base to analyze the delivery capabilities of contractors and program operators.

j. To determine what service mix is most effective in dealing with significant group segments.

2. Regional Office

a. To meet Regional reporting requirements.

b. To inform the Regional Office of the status of youth program learning efforts.

c. To satisfy the Regional Office Knowledge Development Report requirements.

d. To insure that written documentation of the knowledge development experience is completed to meet Regional Assessment Reviews.

3. National Office

a. To inform the National Office of successful program models and innovations.

b. To provide the National Office with a more comprehensive understanding of the dynamics of local youth program learning in relation to the overall programming efforts within local jurisdictions.

c. To inform the National Office of the barriers/obstacles encountered in carrying out the challange of youth programming.

d. To develop a local knowledge base that will assist the National Office in on-going national policy formulation.

e. Preparation of Annual Prime Sponsor Report on Youth Programs: Knowledge Development.

4. CETA Prime Sponsor/Program Operators

a. To establish an informational base upon which to share youth program successes and non-successes with other CETA Prime Sponsors.

b. To provide local contractors, program operators, and LEAs with substantive information on local knowledge development efforts.

5. Public Consumption

a. To inform City Council members, County Commissioners, and other elected officials of youth program evaluation efforts and outcomes.

b. To satisfy the increasing demand for accountability prompted by the surge of press devoted to CETA.

c. To use for general public relations (presentations to parent groups, business associations, community-based organizations, news releases, etc.).

d. To use in soliciting the cooperation of local public interest groups in establishing a solid base of community involvement and support for local youth initiatives.

CHAPTER IV

UNDERSTANDING NATIONAL KNOWLEDGE DEVELOPMENT

CHAPTER 4:

UNDERSTANDING AND USING NATIONAL KNOWLEDGE DEVELOPMENT FINDINGS

As explained at the outset, this guide is principally intended as a primer on methods of knowledge development for local youth staff. Nonetheless, the guide would be incomplete without an overview of the national KD effort, which was instigated by the passage of the Youth Employment and Demonstration Projects Act of 1977. Many of the findings and results of the national effort are of direct use in planning and operating local youth programs.

A detailed history of the Office of Youth Program's knowledge development scheme and corresponding schedule of discretionarily funded projects is beyond our present scope, but we can note the basic rationale and organization of the national KD approach. We can also identify the most direct means for local youth staff to explore and gain access to this burgeoning stockpile of useful youth program findings and results.

The Learning Focus of YEDPA

Learning about youth programs is the central theme of YEDPA. The Act was designed to "try a variety of solutions to youth employment problems," as well as to research, demonstrate, explore, examine, study, and evaluate the solutions tried.

The Office of Youth Programs (OYP) of the Employment and Training Administration was created, in part, to design and oversee a number of discretionary projects in order to answer specific questions generated by the passage of YEDPA. It was OYP which coined the term knowledge development - "a comprehensive, systematic effort to identify, capture, and replicate the lessons learned about the contributions of different

services, participation incentives, and program management approaches aimed at increasing the career potentials of young Americans."

It bears noting that DOL-sponsored efforts to learn more about the employment problems of young people are not new. Although attention to youth employment problems lessened in the early 70's, such efforts were a major DOL priority in the 1960's.*

As spelled out in a series of knowledge development plans, OYP's learning strategy comprised a broad array of more than 200 discretionary projects that systematically addressed critical youth employment issues. For the most part, these projects were relatively complex, often involving sophisticated research methodologies, multi-site designs, and other considerations well out of reach of most local evaluation staffs.

Depending on how much was known about a particular youth employment issue, OYP's discretionary projects were one (or a combination) of three possible sorts:

1. Demonstration Projects - an array of activities and program approach configurations having to do, for example, with in-school programs, private sector initiatives, service mix experiments, educational vouchers, work and education councils.

   A specific example of a demonstration project is the Ventures in Community Improvement Demonstration. Among other things, this 2 year project sought to reveal whether it makes sense to replicate a model community improvement project in widely different areas. This project, successful in Portland, Oregon, was tried in 12 U.S. cities.

*For a synthesis and review of earlier youth program efforts, see Mangum and Walsh (1978), and Walther (1976).

2. Special Research Studies - designed to provide very basic information and analysis concerning youth employment problems and to assess the performance of programs which seek to better the circumstances of youth.

The Youth Labor Market Experience Study is an example of such a research project. This study analyzes youths' labor market behavior 4 to 5 years after graduation from high school.

3. Program Evaluation - primarily process and outcome evaluations of programs already in place, typically as formula-funded youth programs.

The Process Evaluation of Youth Programs, performed by the National Council on Employment Policy (NCEP), is an example of a national KD evaluation project. It assessed the planning, start-up, and operational experience of YCCIP and YETP in relation to other employment and training programs for youth.

OYP initiated projects addressing critical youth employment issues in a manner which was thought to systematically focus new knowledge development efforts on areas that needed attention, building on what was known, and focusing on the next appropriate level of inquiry.

The logical elements of OYP's systematic approach to focus and organize each discretionary project are already familiar to readers of this guide as the steps identified in the local KD model (Figure 1-2). Of course, OYP applied the logic of the KD model on a national, rather than a local, scale. When OYP accomplished such a step in the KD model as "Current Youth Program Assessment" or "Knowledge Base Assessment," it was with reference to a generalized, aggregate picture of the youth employment and training program needs of the entire nation. When the "learning

levels" assessment within the KD model was applied, often to a multi-site demonstration design, the implications of the selection of an appropriate learning level held firm. For example, although OYP might simultaneously explore a new program model at a number of different sites, the effort was still typically conceived as a "demonstration" program, and process-oriented assessment techniques were employed. Correspondingly, outcome/impact research and evaluation techniques were employed in assessing national projects about which more was originally known.

What is significant for local youth staff is that the admittedly awesome OYP discretionary effort can be understood in terms of its many individual projects, each of which is examined according to the same fundamental KD process described in Chapter 1 of this guide. The broad range of issues examined by OYP virtually assures that the findings of at least certain national projects will be of use to local youth staff. Indeed, because of the resources OYP was able to invest in most of its discretionary efforts, a given set of national findings may prove to be among the most valuable of "outside resource" considerations made by a local youth staff in conducting their own local KD effort. For example, OYP has typically examined specific youth program models in a relatively controlled multi-site manner. This approach improves both the likelihood of ascribing causality to program events, as well as the chances of the model program having been demonstrated within a jurisdiction which more closely approaches that of interested local youth staff. Of course, we can never assume that "imported" findings will perfectly fit specific local circumstances, but a closer fit may provide much greater insight in developing local programs.

A Discretionary Study of Vocational Exploration

Examination of the Vocational Exploration Demonstration Project (VEDP) may provide a sense of the scope and rationale of national knowledge development projects. VEDP

is a multi-site test of alternative approaches for conducting a local vocational exploration program.

Vocational exploration is an approach to youth programming which is familiar to most youth employment and training staff. Generally stated, vocational exploration is an educational and motivational experience through which youth learn about the world of work, look at different occupations, jobs, and career opportunities, gain experience useful in making decisions about future directions, and develop a firm behavioral foundation from which to proceed.

However, many specific variations and refinements to the basic approach have occurred since the earliest vocational exploration efforts in 1971. Originally little more than a work experience program, various cognitive and affective enrichments have come to be seen as essential to the approach. Typically utilized in summer programming, some youth staff saw year-round value in the vocational exploration approach. OYP's decision to systematically modify and replicate a number of vocational exploration models was, thus, a national outgrowth of the hodgepodge of sometimes conflicting information which had accumulated around the basic vocational exploration approach.

Teaming up with the National Alliance of Business, the Human Resource Development Institute (of the AFL-CIO), and the St. Louis University Center for Urban Programs, OYP designed VEDP to test alternative vocational exploration approaches of varying duration and with different target groups.

The Vocational Exploration Demonstration Project operates in 16 cities throughout the country and tests five (5) basic program models which employ different strategies for providing a vocational experience for youth. Each of the 16 program operators implement a specific program design based on one of the following five models:

1. Onsite Exposure is occupational exploration through actual placement at a private or public sector employer's place of business for worker shadowing, job/task observation and rotation, and limited practical "hands-on" experience.
2. Vocational Exposure Laboratory is occupational exploration through classroom activities, "survey style" vocational training, limited skill instruction and simulated, "laboratory" mock-up work conducted at union trade instruction institutions, vocational schools, skill training centers, or community colleges.
3. Eclectic Exposure is occupational exploration through a multiple process approach which combines several basic elements into a planned program intervention strategy. These activities include but are not limited to field trips and tours of businesses and industries, films and seminars given by various employers and businessmen, presentation of occupational and vocational information, sessions on survival skills, and youth projects such as small enterprises.
4. Multi Modal Exposure provides for the operation of various mixtures of the three basic types described above.
5. Extension Model Exposure provides Onsite Exposure or Multi Modal Exposure in a sequence of activities that extend over a twelve-month period of time.

All of the local programs have three components--one serving in-school youth, another serving out-of-school youth, and a third, offered during the summer, for both in-school and out-of-school youth. Within each of the three components, all youth receive the same mix of activities and services called for by the specific program model being operated. There are four major areas that will be investigated through VEDP. These include:

- o examining the relationships, in a variety of vocational exploration models, between the people served, the program activities and services, the results and the environmental factors.
- o comparing summer and nonsummer vocational exploration efforts.
- o comparing the effects of exposure to vocational exploration strategies for a 12-month period to similar activities and services offered for shorter periods of time.
- o investigating the effects of vocational exploration programs upon the attitudes and institutional behavior of business and organized labor.

This national demonstration will further indicate the types of youths that most benefit from the vocational exploration experience, the specific program model that produces the best results for certain types of youths, the length of the experience that has the most impact on participants, and the types of labor market conditions that are best suited to the five basic program models. Local program operators will be able to determine the amount of programatic and supportive services that are required to assist in the transition to the world of work. The findings will further indicate the kinds of implementation strategies that are needed to work with the private sector in VEDP as it relates to the size and types of employers and the role of the supervisor. Finally, information on the ease with which linkages with LEA's and other local actors are obtained in implementing a

program, as well as the influence of linkages on the transitional readiness of participants will be available. In addition to the evaluations, the products will include technical assistance guides, monographs, and a model management information system. A system is being developed which will provide for a built-in technical assistance capacity through program committees made up of experienced VEDP operators and specialists from the National Alliance of Business and the AFL-CIO Human Resources Development Institute. These committees would provide information on every aspect of the program including the design, planning, marketing, implementation, administration and research.

Quite clearly, these results will be important for prime sponsors and delivery agents who are considering or have decided on implementing vocational exploration activities. The aggregate findings will suggest whether and to what extent vocational exploration can change awarenesses and outcomes for youth. The vocational exploration approach will be more effective in some settings than others. Prime sponsors and delivery agents should pay particular attention to the relative effectiveness of demonstration project sites with similar characteristics to their own. This will suggest whether and what model to implement. Next, the results will indicate what groups benefit most from VEPs. The findings can be used to establish target group priorities for the projects that are mounted. The process studies and how-to-do-it guides will be useful in the implementation phase. Prime sponsors or delivery agents might avail themselves of the technical assistance network established under VEDP, tapping the expe-tise particularly of nearby sites. The evaluations and instruments used in the national demonstration might be adopted locally to reference performance to national norms. In other words, by careful utilization of

the national demonstration findings, local decisionmakers can determine whether to implement VEPs, the best type and target group priorities, as well as getting help in implemention and assessment.

Finding Out About National KD Results

A range of formal and informal youth program information sources have been mentioned in this guide. Short of accidentally happening upon someone who has experience with precisely the type of program approach, jurisdiction, and clientele as our own, by far the most efficient avenue to youth programming information and assistance in the new "information brokerage" established under the auspices of OYP's Technical Assistance and Training Division.

The function of the youth information broker is to act as an intermediary in matching youth program people who have questions about a particular youth issue area with

However, to reduce the number of research variables, a number of program elements are maintained in common at all sites; such controls include program philosophy and purpose, client eligibility and selection, program reporting formats, and a number of other elements.

Many answers about vocational exploration programming are emerging from VEDP; in some cases, these questions are taking the form of more refined questions that will require additional examination. While such findings are of value to national youth planners in, for example, changing and clarifying youth regulations, they are also of enormous potential benefit to local youth staff in their efforts to develop and implement workable youth programs. The question arises, however, of how local youth staff, typically short of time and money, can gain access to such findings as are emerging from VEDP. If this question is not effectively addressed, there is little chance that local youth staff will directly profit from national knowledge development findings.

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youth program people who have some answers and experience in that issue area. For example, let's assume that our assessment of local youth employment and training in our jurisdiction suggests that a vocational exploration program would be worthwhile. Exciting as the prospect may be, the often conflicting details of how to actually to begin to implement an approach will quickly convince us that some experienced advice would be invaluable. We decide to make use of the youth information broker.

Contact with the OYP youth information broker is initiated through an authorization request to the DOL regional office. After obtaining the necessary authorization, local youth staff may telephone the brokerage service directory. Brokerage staff will listen to our request, perhaps assisting us in clarifying or refining the type of question we have asked. In a reasonably short time, we may expect three types of replies to our request:

a) the results of a bibliographic search through educational and employment and training information banks--including, of course, the latest available findings from OYP's discretionarily funded KD projects.

b) a listing of upcoming national, regional, and local training events that are applicable to our request.

c) delineation of several negotiable technical assistance options tailored to our specific needs.

A part of the broker's function is to guide us to the most useful aids among the wealth of resources that are available. So aided, we may quickly discover some of the answers to our more obvious program implementation questions about vocational exploration, such as what basic program models exist, staffing, budgeting, and so on. However, we may also be alerted to a variety of issues and questions we may not yet have asked about vocational exploration programs. What about the intricacies of establishing local linkages with LEAs and CBOs? What about the issue of

remediation among youth participants with widely varied skill levels? Do the needs of in-school and out-of-school youths differ, such that different types of vocational exploration program approaches are called for in each instance? What about expectations of private sector employers participating in the program, and what are the best methods for marketing the program concept to these people? How difficult is job site development, and how much rotation is it fair to expect of certain types of employers as well as participants? What are the key issues and choices in classroom or coping skills curriculum design? And so on.

Utilizing National Findings Locally

Our own local circumstances will, of course, be unique. Nonetheless, in implementing our vocational exploration program, we may clearly benefit from the hard won advice of others involved with similar projects.

In sifting and sorting national findings, we are at one of the important junctions that connects and intertwines local and national knowledge development efforts. The imported findings we are considering are, themselves, products of the knowledge development process, pursued on learning levels appropriate to others' circumstances. We may benefit locally from these findings, but only to the extent that we use them as raw material in our own version of the same KD process, and at the learning level that is appropriate for us. As discussed earlier, the particular way in which we respond in our own program development cycle depends on a host of circumstances which define our unique labor market environment, clientele, staff, jurisdiction and so on. We may conduct a simple model demonstration or a design based on an elaborate replication of a multi-dimension model tried successfully elsewhere. We may design and deliver these services with our own staff, or subcontract them to a CBO or other community or institutional body according to our specifications. These are unique actions, but,

viewed more broadly, they are actions taken within the overall knowledge development process; the fundamental logic of the process holds, regardless of scale (national or local), specific learning level, or the sophistication of staff or type of jurisdiction. The KD process is a powerful tool; as with any tool, one must learn how to use it with purpose and care.

CHAPTER V

SELECTED REFERENCES

CHAPTER 5

SELECTED REFERENCES

The following selection of references is not meant to be complete. Instead, it represents a thoughtful culling through the enormous applied social research literature, which may be of some help to busy, often harried, youth planner/evaluators. In particular, the literature of social program evaluation has blossomed in the past dozen years as the field has come of age. However, much of this literature is repetitious, and an attempt has been made to eliminate redundancy.

The references are broken into four categorizes:

I. Knowledge Development/Youth Programs

II. Program Evaluation: Employment Related

III. Program Evaluation: General and Methodological

IV. Social Research Methods: General

I. Knowledge Development/Youth Programs

1. A Guide to Knowledge Development. Prepared for U.S. Department of Labor, Employment and Training Administration, Office of Youth Programs, 1979.

(A lengthly resource guide for local prime sponsors; originally prepared for a series of workshops on Knowledge Development sponsored by the Office of Youth Programs.)

2. Brandis University Center for Public Service. Youth Programs: Knowledge Development Through the Youth Initiatives.

(A useful, irregularly published newsletter.)

3. "Completing the Youth Agenda: A Plan for Knowledge Development, Dissemination and Application for Fiscal 1980." U.S. Department of Labor, Employment and Training Administration, Office of Youth Programs, October, 1979.

(A compilation of the final national K&D philosophy and discretionary program thrusts of the Office of Youth Programs. Also see earlier plans for FY'78 and FY'79.)

4. Mangum, Garth, and Walsh. Employment and Training Programs for Youth: What Works Best for Whom? Washington, D.C.: U.S. Department of Labor, Employment and Training Administration, Office of Youth Programs, May, 1978.

(An extremely useful review and synthesis of 17 years of public experimentation with employment and training programs for youth.)

5. Publication List, Office of Youth Programs Library, 601 "D" Street, N.W., Room 7108, Washington, D.C. 20213.

(A complete, annotated listing of all current publications of the USDOL/ETA, Office of Youth Programs. Write for the most current listing.)

6. Snedeker, Bonnie. Getting There: A Case Study Report on the Lives, Employment Preparation, and Prospects of YEDPA Participants. Washington, D.C., U.S. Department of Labor, Employment and Training Administration, Office of Youth Programs, 1980.

(A clear illustration of the use of intensive interviewing methods in youth program assessment, this excellent work provides eloquent testimony to the use and value of qualitative assessment techniques in youth programs.

7. Vocational Foundation, Inc. You and Youth.

(A monthly newsletter devoted to "What American business is doing to employ and train young people.")

8. Walther, Regis H. Analysis and Synthesis of DOL Experience in Youth in Transition to Work Programs. Washington, D.C.: U.S. Department of Labor, Employment and Training Administration, 1976.

(Good, though now dated, overview of DOL experience with components of employment and training programs for youth.

9. "Youth Program Models and Innovations." U.S. Department of Labor, Employment and Training Administration, Office of Youth Programs.

(A monthly series of descriptions of local program innovations distributed 10/78 - 10/79.)

II. Program Evaluation: Employment Related

1. Bennett, E.C., and Weisinger, M. Program Evaluation: A Resource Handbook for Vocational Rehabilitation. New York: ICD Rehabilitation and Research Center, 1974.

(A manual intended for vocational rehabilitation program evaluators, which is of value to prime sponsor evaluators.

2. Borus, Michael E. Measuring the Impact of Employment-Related Social Programs. Kalamazoo, Michigan: W.E. Upjohn Institute for Employment Research, 1979.

(Devoted entirely to a discussion of outcome, rather than process, evaluation.)

3. "CETA: Comprehensive Program Review and Assessment Training." A technical training package developed for the U.S. Department of Labor, Employment and Training Administration, 1977.

(A loose leaf publication which includes many exercises dealing with a full range of prime sponsor assessment techniques: orientation, planning assessments, monitoring, evaluation, and utilization of assessment information.)

4. Mangum, Garth, et al. Self Evaluation of CETA Manpower Programs: A Guide for Prime Sponsors. CETA Technical Assistance Document. Washington, D.C: U.S. Department of Labor, Employment and Training Administration, 1975.

(A practical systematic guide to local monitoring and evaluation of all CETA titles.)

5. Sum, Andrew, et. al. Evaluating the Performance of Employment and Training Programs at the Local Level (Vols. 1-3). Boston: U.S. Dept. of Labor, and Training Administration, Region I, 1978.

(A very complete guide to evaluation at the prime sponsor level with a complete discussion and examples of process, outcome, and benefit-cost evaluation techniques. An entire volume is dedicated to conducting and using the results of follow-up studies.)

III. Program Evaluation: General and Methodological

1. Cook, Thomas D., and Reichardt, Charles S., editors. Qualitative and Quantitative Methods in Evaluation Research. Beverly Hills: Sage Publications, 1979.

(A collection of articles which develop the case for using a blend of both qualitative and quantitative techniques in program evaluation.)

2. Epstein, Irwin, and Tripodi, Tony. Research Techniques for Program Planning, Monitoring, and Evaluation. New York: Columbia University Press, 1977.

(A good quick overview of research concepts and techniques for administrators.)

3. Evaluation and Program Planning. New York: Pergammon Press. Published quarterly.

4. Evaluation Review: A Journal of Applied Social Research. Beverly Hills: Sage Publications, published six times yearly.

(One of the principal, multidisciplinary forums of evaluation researchers.)

5. Isaac, S. and W.B. Michael. Handbook in Research and Evaluation. San Diego: Edits, 1971.

(A very handy, educationally oriented digest of principles, methods, and strategies useful in all phases of evaluation research.

6. Levitan, Sar A., and Wurzburg, Gregory. Evaluating Federal Social Programs: An Uncertain Art. Kalamazoo Michigan: The W. E. Upjohn Institute for Employment Research, 1979.

(A broad scale assessment of the nature and value of DOL and HEW social program evaluation)

7. Morris, Lynn Lyons, and C.T. Fitz-Gibbon. Program Evaluation Kit. Beverly Hills: Sage Publications, 1978. Includes the following books:

a. Evaluator's Handbook

b. How to Deal with Goals and Objectives

c. How to Design a Program Evaluation

d. How to Measure Program Implementation

e. How to Measure Achievement

f. How to Calculate Statistics

g. How to Present an Evaluation Report

h. How to Measure Attitudes

(An excellent set of books rich in procedure and example; examples are primarily from the field of education.)

8. Patton, Michael Q. Qualitative Evaluation Methods. Beverly Hills: Sage Publications, 1980.

(An in-depth exploration of strategies for generating valid, useful, and credible qualitative information for decision-making.)

9. Patton, Michael Quinn. Utilization - Focused Evaluation. Beverly Hills: Sage Publications, 1978.

(Combining the theoretical and the practical, Patton examines how and why to conduct evaluations. His principal concern is for enhancing the likelihood for actual utilization of evaluation findings.)

10. Rossi, Peter H., et. al. Evaluation: A Systemmatic Approach. Beverly Hills: Sage Publications, 1979.

(A comprehensive text dealing with planning, designing, and implementing evaluations of both established and innovative social programs and projects. Includes detailed treatment of cost benefit and cost effectiveness techniques.)

11. Struening, Elmer L. and Marcia Guttentag. Handbook of Evaluation Research. (Vols. 1 & 2). Beverly Hills: Sage Publications, 1976.

(A technical but readable compendium of the methods required at every step of the evaluation process. Probably the easiest way to scan the classic articles in the field.)

12. Stufflebeam, Daniel L. "Evaluation as Enlightenment for Decision Making." An address delivered at the Working Conference on Assessment Theory, The Association for Supervision and Curriculum Development, Sarasota, Florida, January, 1968.

13. Suchman, E.A. Evaluative Research. New York: Russell Sage, 1967.

(Fairly technical and academic, this is one of the early classics of the program evaluation literature.)

14. Weiss, Carol H. Evaluation Research. Englewood Cliffs: Prentice-Hall, 1972.

(A good basic overview of the purpose and politics of social program evaluation.)

IV. Social Research Methodology: General

1. Blalock, H.M. Social Statistics (3rd edition). New York: McGraw-Hill, 1979.

(An excellent text, one of the current standards of statistical methods courses in sociology.)

2. Bogdan, R., and Taylor, Steven. Introduction to Qualitative Research Methods. New York: John Wiley, 1975.

(Good rationale and illustration of how to conduct and report qualitative research.)

3. Campbell, Donald T., and Stanley, J.C.. Experimental and Quasi-Experimental Designs for Research. Chicago: Rand McNally, 1963.
(Academic, the classic statement of "quasi-experimental" methods which may possibly be used when program conditions will not permit "true" experimental designs.)

4. Eckhardt, K.W. and Ermann, M.D. Social Research Methods: Perspective, Theory, and Analysis. New York: Random House, 1977.
(A basic, comprehensive research methods text.)

5. Gay, L.R. Educational Research: Competencies for Analysis and Application. Columbus, Ohio: Charles E. Merrill Publishing Company, 1976.
(A relatively comprehensive introductory text on the methods of educational research.)

6. Gay, L.R. Educational Research: Models for Analysis and Application. Columbus, Ohio: Charles E. Merrill Publishing Company, 1976.
(A very basic, self-paced introduction to planning, conducting, and reporting simple educational research. This manual is designed to accompany Gay's Educational Research: Competencies for Analysis and Application.)

7. Hays, W. Statistics. New York: Holt, Rhinehart, and Winston. 1963.
(There are many statistics texts, but this one remains an academic classic; examples are principally from psychology.)

8. Lofland, John. Analyzing Social Settings: A Guide to Qualitative Observation and Analysis. Belmont, CA: Wadsworth, 1971.

(A readable guide to qualitative methodology. Strong on techniques of observation and analysis of qualitative materials.)

9. Mager, Robert F. Goal Analysis. Belmont, CA: Fearon, 1972.
(A short, humorous, and very readable discourse on goal establishment and clarification.)

10. Nie, N.H. et. al. Statistical Package for the Social Sciences (SPSS) (2nd edition). New York: McGraw-Hill, 1975.
(A tremendous tool to know about SPSS. Is probably the best of the easily used "canned" statistical programs.)

11. Stevenson, W. Quantative Analysis in Human Resources Research. Salt Lake City: Human Resource Institute, 1976.
(One of the few introductory statistics texts specifically oriented toward employment and training practitioners.)

12. Webb, E.J. et. al Unobtrusive Measures: Non-Reactive Research in the Social Sciences. Chicago: Rand McNally, 1966.
(A unique explanation of how physical evidence, secondary data, and simple observation may be used as alternatives or supplements to interviews and questionnaires in social science research.)

13. Wright, Sonia R. Quantitative Methods and Statistics. Beverly Hills: Sage Publications, 1979.
(A "survival manual" approach intended to serve as a quick and straightforward overview of the principles and techniques of quantitative social research.)