## **Vocational Evaluation Services in The Human Services Delivery System**

Vocational Evaluation as a Component of a Delivery System
General Characteristics of the Manpower Service Delivery System
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A question of basic concern to persons interested in vocational evaluation is: What is the role of vocational evaluation services within the total spectrum of the human services delivery system? This question may appear to be abstract and theoretical to the vocational evaluation practitioner, who most commonly is interested in questions of technology and practice. Yet a knowledge of the role of vocational evaluation services in the human services delivery system has many meaningful practice implications.

Vocational evaluation is not a "free standing" service in the sense that it can generate its own clientele and generate goals and outcomes autonomously. Instead, vocational evaluation services are imbedded within larger delivery systems which influence and constrain the practice and technology of vocational evaluation. For example, these large delivery systems have a gate-keeping function relative to vocational evaluation services, controlling both the number and types of persons served in a vocational evaluation program. These systems have a goal determining function relative to vocational evaluation, controlling the range of acceptable outcomes. They also have other effects on vocational evaluation, including finances (which may affect the technology used in the program) and personnel requirements (which may affect the staffing pattern of the program).

The question of the role of vocational evaluation services within the human services delivery system is of direct concern to planners and administrators within the system. It is these persons who determine goals, the range of outcomes, finances, personnel requirements, and client flow through the system. Unless these persons have a clear conception of the place of vocational evaluation within the human services delivery system and an awareness of the resources which must be allocated to make vocational evaluation a part of the system, vocational evaluation will be

doomed to an early death.

We will be concerned here with questions related to the function of vocational evaluation within delivery systems and not with questions of technology and practice. Essentially, we will regard vocational evaluation as a "black box" and we will deal with what goes in and what comes out

of the black box, but not with the internal operations of the black box. We will deal with the function of vocational evaluation without regard to who performs the function or what it is performed with. This immediately causes problems since there is a considerable degree of confusion as to what is meant by "vocational evaluation."

The term vocational evaluation is used to mean a particular function which takes place within a delivery system. Typically this function leads to the development of a reasonable vocational objective and of a course of action to attain the objective. Vocational evaluation can also be taken to mean a particular technology of assessment—as the focal point of an assessment process which extends over a period of several days or more. Lastly, vocational evaluation can be taken to mean something which a particular kind of person does; typically a person becomes a vocational evaluator by virtue of training, certification, experience, or by the simple expedient of being hired into a position titled "vocational evaluator."

In common usage there is often a mixture of function, technology, and person references so that it becomes very difficult, if not impossible, to clearly understand what is being said. However, we will be concerned here primarily with the function of vocational evaluation. Technology and

personnel are the subject of other task force reports.

## VOCATIONAL EVALUATION AS A COMPONENT OF A DELIVERY SYSTEM

It is interesting to observe that although the terms "human services" and "delivery system" are currently bandied about by many people, there have been few attempts to describe what is actually meant by them. We can define "human services" as being activities or goods provided to people to enable them to deal "with their personal environments in such a way that they can gain some control over their own destinies and exercise some freedom of choice in their lives" (Demone and Harschbarger, 1973). A delivery system, then, is simply the organizational structure by which the necessary activities and goods are provided to those people who need them.

Human services can be placed into at least three broad categories: health care, income maintenance, and manpower. Health care services are those related to the prevention of disease and restoration of health. Income maintenance services are related to the economic issue; Welfare and Social Security are two such services. Lastly, are the manpower services. These relate to vocation, occupation, other productive and self-fulfilling activities, and even (negatively stated) the status of not being an unnecessary burden upon others.

At this level of analysis, it is possible to think in terms of "delivery systems" in the sense that there are commonly a variety of possible activities or goods which could be provided within each category.

#### **Assessment Services**

The next level of analysis requires us to begin thinking of specific types of services, as we can see in Figure 1. Within manpower services are

# HUMAN SERVICES DELIVERY SYSTEM MANPOWER SERVICES DELIVERY SYSTEM ASSESSMENT SERVICES CLINICAL ASSESSMENT SERVICES VOCATIONAL EVALUATION **SERVICES**

Figure 1. Vocational evaluation services in the human services delivery system.

those specific services which relate to assessment. We may consider assessment to be a process of finding out what the problems of an individual are in the manpower area and devising proposals as to what to do about them. In other words, assessment in manpower services is akin to diagnosis in health care services. It is a process in which an understanding of an individual which leads to a course of action is developed. A passive labeling or description of individual impairment has very little social utility unless it contains or implies a course of action or set of treatments to be provided which will overcome the dysfunction.

Within assessment services are those which are highly individualized and dependent upon observations and judgements made by people, rather than the mechanical use of norm tables. These *clinical assessment services* arose to identify the needs of atypical and impaired people for whom the normative approaches were not effective. These are individualized and specialized to the needs of special people and, consequently, clinical

assessment services tend to be time consuming and expensive.

Lastly, within clinical assessment services is a particular type of assessment characterized by the use of real or simulated work tasks and activities in a situation which simulates some of the demands of work environments. This is termed *vocational evaluation*. As a specialized form of clinical assessment, requiring a specialized technology and environment, it is the most expensive and time consuming assessment service, requiring a period of several days, or even weeks, of close observation and judgement. Even with all of its complexity and expense, vocational evaluation is rooted in the simple notion that, for some people, the optimal way to understand how they function in a particular situation is to put them into the situation and watch what happens (Wernimont and Campbell, 1967).

To summarize: When we talk about the place of vocational evaluation within the human services delivery system, we have to recognize that it is, in fact, a sub sub-system. Things happen within the system which greatly affect how vocational evaluation as a service functions. In the following sections, we will take a closer look at the manpower services delivery system and how it operates and also at some of the barriers to the effective use of vocational evaluation services within this delivery system.

## GENERAL CHARACTERISTICS OF THE MANPOWER SERVICE DELIVERY SYSTEM

Broadly considered, the manpower services delivery system is made up of all those programs, agencies, and services directly concerned with the development and restoration of economic self-sufficiency. This includes a wide array of diverse programs, but some sense can be made out of this delivery system by examining three general characteristics of the system: (1) the goals; (2) the service delivery model; and (3) the functioning of programs relative to target populations.

#### **System Goals**

The goal which roughly serves to define the manpower services delivery system is the development and restoration of economic self-

sufficiency. This goal is typically attained when individuals served by a program engage in gainful employment. Consequently, frequently stated objectives of programs in the manpower services delivery system are the development of employability or job placement. The success of a program can be judged by the number of persons served who engage in gainful employment during a particular period of time. Individual programs within the manpower services delivery system may include outcomes other than gainful employment in their definition of success. For example, the state-federal vocational rehabilitation program includes homemakers (persons who care for their home and other family members) and educational programs include students (persons who go on to enroll as students in academic and vocational skill training programs). Currently, however, most programs within the manpower services delivery system regard engaging in gainful employment as the ultimate in client success.

Morris (1973) has questioned the appropriateness of the economic self-sufficiency goal. He observes the "economic self-sufficiency is less dependent upon social services than upon the functioning of economic forces far beyond the reach of the social services program." No matter how effective the service program, whether or not the client engages in gainful employment depends upon the state of the economy and the labor market, factors which are outside the direct control and influence of the service program. Morris argues that the goal of economic self-sufficiency is actually subsumed within a larger goal which is more appropriate and meaningful for human services programs. This goal is the development and restoration of functional independence. This goal is defined and ex-

plained in the following way:

Functional independence means the capacity to take care of one's own affairs to the extent that physical conditions permit and to the extent that economic conditions permit. Satisfactory social goals are achieved when individuals are brought to functional independence, even if jobs are not available or because social norms require that the individual remain out of the labor force, as is the case for mothers with very small children. Such a social goal is also satisfied if individuals with severe physical or psychological handicaps are enabled to remain in their community, with or without work, through physical or psychological rehabilitation plus essential supportive services to complement that element of functional capacity which cannot be restored by medical science. Such a goal is contained in all current federal planning and requires only respect for functional capacity, separate from economic independence, as the end product of the social services. Functional independence may lead to economic independence if there are jobs; if there are none, the functional independence results in a socially healthy individual and reduces unnecessary and costly institutionalization (Morris, 1973, p.

Morris' alternative goal of functional independence includes within it all of the currently accepted economic self-sufficiency outcomes. However, it would expand the range of acceptable outcomes to include some which are currently being attained by service programs but which are not formally regarded as acceptable or successful outcomes.

The utility of the goal of development and restoration of functional independence can best be understood by examining the range of possible functional outcomes. These refer to those activities in which a person is capable of engaging on a regular basis and which require the use of time, strength, or faculties. Defining functional outcomes in terms of activities can lead to observable performance and behavioral descriptions of these activities, a factor which greatly simplifies the problem of assessing the outcomes and effects of a service program.

Table 1 presents a listing of functional outcomes. This list places those functions relating to gainful employment at the top. In general, these activities have some economic value; the value added to some product or service resulting from the activities of an individual and the value added to the economy by the wages paid for these activities. As we have noted, most manpower services delivery programs are currently oriented toward

attaining these outcomes.

The list also includes activities which have primarily social and personal value. As Adelson (1970) has observed there are many useful activities in this society for which no reimbursement is provided, and which are not considered as jobs.

In other words, a "job" or "gain" cannot be used as the sole defining characteristic of success. Any of the functional outcomes in the list is a success if it represents the optimal functioning of the individual. This is true even for those functions at the lowest level of the list, even though

VR Goals

Table 1. A Listing of Functional Outcomes

- 1. Competitive employment—self-employed
- 2. Competitive employment—career
- 3. Competitive employment—long-term
  4. Competitive employment—short-term
- 5. Competitive employment—marginal
- 6. Competitive employment—subproductive
- 7. Sheltered employment—transitional 8. Sheltered employment—long-term
- 9. Homebound employment—self-employed
- 10. Homebound employment—employee
- 11. Temporary unemployment-marketable job skills
- 12. Work activities programming—long-term
- 13. Volunteer work
- 14. Unpaid home worker—care of home and other family members
- 15. Community activity—individual use of time
- 16. Programmed day activities
- 17. Homebound—individual use of time in home
- 18. Homebound—independent total self-care
- 19. Family or community assistance—partial self-care
- 20. Structured living environment—partial self-care
- 21. Total dependence on others—short-term
- 22. Total dependence on others—long-term

individuals functioning at these levels are unemployed and institutionalized. In fact, such individuals may actually play a vital role in the economy. Economists discuss a thing called the "Phillips curve" which summarizes the conflict between full employment and stable wages and prices (Hines, 1970). Essentially, within our present economy, if the unemployment rate drops below 4.5%, high inflation results. The interesting conclusion to be drawn from the Phillips curve is that we need people who are pure consumers and not producers to stabilize the economy. What is an optimal outcome for the individual should be valued and not the outcome itself

The primary utility of the listing of functional outcomes is that it allows for a more precise definition of program goals. If the broad goal of the manpower services delivery system is to develop and maintain functional independence, specific programs within the delivery system can be described in terms of the specific functional outcomes attained by these programs. As we have noted, most of the public sector manpower programs are directed toward attaining goals related to competitive employment. A somewhat different picture emerges when the specific outcome goals of private sector programs are considered. For example, there are numerous programs offered within rehabilitation facilities which are directed toward attaining outcomes at lower levels of the list. By the same token, it can be observed that most of the programming directed toward attaining career and long-term competitive outcomes is provided by educational institutions, business, and industry. The public manpower programs tend to ignore these outcomes.

Currently, considering all of the specific programs comprising the manpower services delivery system, all of the outcomes in the list are being attained for clients. However, no single program within the system is directed toward attaining all of the possible functional outcomes. Rather, each program tends to define a specific set of outcomes as acceptable.

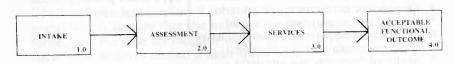


Figure 2. Generic model of a manpower service program delivery system.

#### The Service Delivery Model

Virtually all of the specific programs within the manpower services delivery system use a similar service delivery model, as shown in Figure 2. Service delivery begins with the INTAKE (1.0) function. The objective of this function is to determine whether a person is a member of a program's target population. The INTAKE function may vary in detail and sophistication depending on the criteria used to define each program's target population. For example, the state-federal employment service program has as its target group anyone who applies for service, while the

state-federal vocational rehabilitation program defines its target group in such a way that the INTAKE function must provide for the documentation of the existence of a physical or mental handicap, the existence of a vocational handicap, and the existence of a reasonable expectation that the person will benefit from services. In the first case, INTAKE simply involves the completion of an application blank while, in the second case, medical examinations and specific interviewing would be involved. Numerous criteria for defining target groups exist in different programs. Some of these include age, income level, geographic location, ethnic or minority group membership, and possession of a specific disability.

Movement to the second function, ASSESSMENT (2.0), occurs after it has been determined that the person is a member of the program target population. The objective of the ASSESSMENT function is to generate a course of action in relation to attaining one of the program's acceptable The ASSESSMENT function (also termed functional outcomes. appraisal or evaluation within some programs) takes into account the functional disabilities of the person, the availability of services, treatments, and other interventions which remove, reduce, or compensate for the functional disabilities, and the optimal outcomes for the individual. ASSESSMENT is a complex, decision-making function which determines both the expected outcome for the individual and the specific services to be provided to enable the individual to attain the outcome. Even though the ASSESSMENT function is complex, within most manpower service programs it is performed quickly and makes extensive use of information provided directly by the individual.

The course of action generated within the ASSESSMENT function determines which services are provided in the SERVICE (3.0) function. Although there is a wide array of possible services which can be provided to people, the actual number of services provided within any one service program is limited. For example, the state-federal vocational rehabilitation program routinely provides three major types of services: counseling and guidance, physical restoration, and training. The extent and variety of routinely provided services is largely determined by the basic characteristics of the program's target population. These characteristics usually become known within a short while after the program becomes operational and commonly lead to the development of a standard service package applicable to most of the clients served in the program.

The objective of the last function, ACCEPTABLE FUNCTIONAL OUTCOME (4.0), is satisfactory placement of the client into one of the functional outcomes acceptable to the program. These were discussed in detail earlier. This function includes placement and monitoring activities necessary to move the client into the desired outcome and to insure functioning at a satisfactory level.

The generic service delivery model described here fits the operation of most service programs within the manpower services delivery system. It describes the process and sequence of activities which most clients go through once they enter a service program.

#### Service Programs and Special Needs Groups

We have indicated that service programs are established to provide services to a particular target group. Additionally, we have indicated that the specific services ordinarily provided within the program are largely determined by the unique characteristics of the target population. In an actual operational program, the impact of the characteristics of a specific target group is evidenced in all of the functions within the service delivery design. This will determine what is ordinarily done in the INTAKE, ASSESSMENT, SERVICES, and OUTCOME functions. An operational service program adjusts its operations and techniques to serve its target population most effectively. However, in doing so, the delivery system loses some flexibility in accommodating the full range of persons included in the target group. Essentially, the service delivery model becomes highly efficient and effective for the typical members of the target population, but inefficient and ineffective for those members of the target population who have characteristics different from those of the predominant group. An alternative delivery model must be developed to accommodate this "special needs" group within the target population made up of individuals who differ from the primary group.

A service delivery model accommodating the special needs group is shown in Figure 3. The increase in complexity of the service delivery system is apparent in this figure. As with the primary target population, members of the special needs group go through the usual INTAKE and BASIC ASSESSMENT PROCESS functions. However, with this group the BASIC ASSESSMENT PROCESS fails to generate a course of action. Rather, it only identifies the person as a member of the special needs group and causes the person to enter the ALTERNATIVE ASSESS-

MENT PROCESSES (5.0) function.

The ALTERNATIVE ASSESSMENT PROCESSES are those which have been established to generate a course of action with members of the

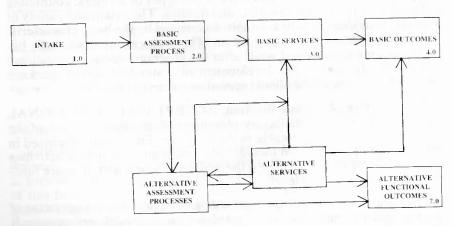


Figure 3. Generic model of a manpower service program delivery system accommodating the special needs group.

special needs group. We noted earlier that the BASIC ASSESSMENT PROCESS was a complex, decision-making function which typically is performed quickly and makes extensive use of information provided directly by the client. The ALTERNATIVE ASSESSMENT PRO-CESSES are generally much more time consuming, involving detailed case study and history recovering methods, and make use of other sources of information about the client, including various testing devices and procedures. By the same token, the decision-making involved is much more complex since many more factors need to be considered. The primary service delivery model needs only to consider a compact array of alternatives based upon the basic characteristics and needs of the target population. The special needs group presents a wider array of functional disabilities which limit and handicap the members of the group. A wider array of service alternatives is available for this group, including many which are uniquely individualized. Lastly, the array of optimal individual functional outcomes is wider in that the special needs group often contains members for whom it is unrealistic to consider the usual acceptable functional outcomes of the program particularly when these are aimed at economically remunerative functional outcomes.

It can be seen that the ALTERNATIVE ASSESSMENT PRO-CESSES can lead to a variety of different courses of action. Even at the level of gross analysis contained in Figure 2, five different action sequences are available. A course of action involving BASIC SERVICES (3.0) leading to BASIC OUTCOMES (4.0) can be developed. There are three courses of action involving ALTERNATIVE SERVICES (6.0). ALTERNATIVE SERVICES are individualized, goal directed services which directly act to remove, reduce, or compensate for the functional disabilities of the individual. These may enable the person to engage in subsequent BASIC SERVICES, or in a BASIC OUTCOME, or in an ALTERNATIVE FUNCTIONAL OUTCOME. The ALTERNA-TIVE ASSESSMENT PROCESSES can also directly lead to an AL-TERNATIVE FUNCTIONAL OUTCOME (7.0), as in the situation where it is found that the person is already functioning at an optimal level and no substantial gain in functional independence could be expected through the provision of services.

All target populations contain a basic group and a special needs group. Information gained from a Forum of National Organizations Concerned with Vocational Evaluation, held in conjunction with the Vocational Evaluation Project, October 24-25, 1973, indicated agreement on the notion that some persons served by manpower service programs needed special assessment processes before a course of action could be established. The representatives of these national organizations were unable to clearly describe the characteristics of the special needs groups within their specific target populations. However, the limited information provided was suggestive of the idea that even though the target populations for specific programs within the manpower service delivery system may vary widely, the special needs groups within these varying target populations may be rather homogeneous. The special needs group ap-

pears to be made up of individuals with severe vocational handicaps which tend to be unrelated to other characteristics of these individuals.

There are no accurate figures on the sizes of the special needs groups. However, there are some studies done in different manpower service programs (primarily education, labor, and rehabilitation) which have estimated the proportion of clients from a target population who fall into a special needs group. These estimates range from 10% to 20%, but cluster around 15%. As applied to the service delivery system models presented here, these estimates would suggest that, for a given service program serving a specified target population, 85% of the target population would be effectively served by the basic service delivery program (Figure 2), while 15% of the target population would require the services provided within the special needs group service delivery program (Figure 3).

The generic service delivery models developed in this section can be

summarized as follows:

1. Manpower service programs are oriented toward developing and restoring functional independence in clients served by the programs.

2. Specific goals relating to functional independence can be stated in terms of activities engaged in by people on a regular basis. They can

be arranged in the form of a functional outcomes hierarchy.

3. Individual programs within the manpower service delivery system typically adopt one or more of the activities from the hierarchy as legitimate or acceptable goals; most commonly these are functional outcomes which also bring some measure of economic self-sufficiency to the person.

4. Programs within the manpower services delivery system use a delivery system made up of four functional components intake, assess-

ment, services, and outcome.

5. Target populations served by programs are composed of two groups: the basic target population (approximately 85%) made up of those individuals for whom the standard operations of the program are efficient and effective in attaining program goals, and a special needs group (approximately 15%) made up of individuals who are not efficiently and effectively served by the standard program.

6. To accommodate the special needs group, service programs develop an alternative service delivery track, which includes alternative assessment processes and services, and which may lead to the attainment of functional outcomes not ordinarily considered acceptable

within the basic program.

## VOCATIONAL EVALUATION: AN ALTERNATIVE ASSESSMENT SERVICE

Many definitions of vocational evaluation services have been advanced. The definition developed by the Tenth Institute on Rehabilitation Services (1972) and provisionally adopted by the Vocational Evaluation and Work Adjustment Association states that:

Vocational (work) evaluation is a comprehensive process that systematically utilizes work, real or simulated, as the focal point for assessment and vocational exploration, the purpose of which is to assist individuals in vocational development. Vocational (work) evaluation incorporates medical, psychological, social, vocational, educational, cultural, and economic data in the attainment of the goals of the evaluation process.

Vocational evaluation services, by this definition, fall within the assessment function of the manpower services delivery system, and are one of the alternative assessment processes, as diagrammed in Figure 3. We have already noted that basic assessment processes tend to be brief and rely upon information produced directly by the client. Vocational evaluation, because of its reliance upon the use of real or simulated work as an assessment form, is a lengthy process making extensive use of observations of client work performance and behavior.

Regarding vocational evaluation as one of the alternative assessment processes available within the manpower services delivery system enables us to identify both the goals of the process and the target populations served within the process. Further, it enables us to discuss some of the important strategies of caseflow into and out of the service.

#### **Target Population for Vocational Evaluation**

The appropriate target group for vocational evaluation services is the special needs group within a particular service program target population. It has already been noted that the special needs group consists of approximately 15% of the total target population. The specific characteristics of the vocational evaluation target population may vary depending upon the particular manpower service program being dealt with and with the availability of alternative assessment processes which may precede vocational evaluation. The entire special needs group in any particular service population may not receive vocational evaluation services; however, the target population for vocational evaluation services is drawn from special needs groups.

Target populations for manpower service programs are commonly described in terms of characteristics which can be readily detected within the intake function of the program. This enables a quick and reasonably accurate decision about the eligibility of the person for program services to be made. For example, the state-federal vocational rehabilitation program uses the existence of a physical or mental disability as one eligibility determinant, while the Veterans Administration looks at whether or not the person is a veteran. Nagi (1974), however, notes that service agencies tend not to use explicit criteria for determining eligibility, but rather rely upon the exercise of professional judgement. In this sense gate-keeping decisions tend to be complex and non-routine, and often require the professional worker to gather a considerable amount of information before a gate-keeping decision can be made. To use vocational rehabilitation as an example again, an eligibility criterion which must be met is that there is a reasonable expectation that the person will benefit from services. Often this cannot be determined without extensive assessment and trial service provision.

The importance of this is that, in actual operation, delivery systems tend to combine the INTAKE and ASSESSMENT functions shown in Figures 2 and 3. Thus, assessment may be provided to a client who ultimately is determined not to be eligible for further services. This causes some operational problems which we will discuss in more depth later.

Once the person is in the assessment component, attention commonly shifts to assessing the functional competencies of the individual particularly in relation to those competencies required for success at various levels of functional independence. The basic assessment process within a service program is developed around information gathering and decision-making strategies which allow for quick, efficient, and accurate determination of likely functional outcomes for the person. A comparison of present competencies to those needed for success in a probable outcome (an assessment of functioning) enables the worker within the service program to determine the person's functional disabilities. As the term is used here, a functional disability refers to a present lack of competency in performing a task necessary for success in one of the probable functional outcomes. Once the functional disabilities of the person are known it is a relatively simple matter to determine which of the available system services are needed to overcome these disabilities and bring the person's overall level of competence up to that necessary for success in a selected functional outcome.

There are three basic ways in which the basic assessment process may not be appropriate for a person in the special needs group. First, it may not be possible to select probable functional outcomes. This may result from a variety of factors, including the ability of the person to decide on goals. Second, it may not be possible to establish the current competency level of the individual. This can occur if the person is unaware of abilities or unable to adequately communicate this information in an interview situation. Third, the person may have multiple functional disabilities which make it difficult to establish a reasonable course of action.

The special needs target population served by vocational evaluation typically has one or more of these basic problems. In other words, use of vocational evaluation services may be indicated when one or more of the following situations exists: (1) inability to establish a probable functional outcome goal for the person; (2) inability to establish the present functional competency level of the person; and (3) inability to establish a course of action for a person with multiple functional disabilities. A target population defined in these terms is probably fairly homogeneous, even though it may be drawn from the special needs groups of several different service programs within the manpower services delivery system.

#### **Target Population Characteristics**

It may be helpful at this point to describe some of the characteristics of persons who have received vocational evaluation services. To obtain this information, the Research and Training Center at the University of Wisconsin-Stout sent a client characteristic survey to 269 randomly selected individuals who had actively participated in the Vocational

Evaluation Project during 1972-1973. Each respondent was asked to complete a survey schedule on the last client served for whom a report had been completed. Valid responses were received from 111 persons, a 41.3% response. Because of the timing of the survey, it can be said that these data are representative of clients who completed vocational evaluations during the first quarter of 1974.

Table 2 summarizes some of the basic demographic characteristics of vocational evaluation service recipients. It can be seen that the recipients are predominantly young, single, male, and not minority group members. Over half of the recipients are at an age where they could be said to be

making the transition from school to work.

Table 3 gives the vocational characteristics of the service recipients. The median education level of the group was 10.3 grades. However, it should not be overlooked that almost two thirds of the recipients have less than a high school education. Similarly, although approximately two thirds of the group have had some work experience, this tends to concentrate in the service, clerical, and structural work occupations.

We have noted that vocational evaluation services are deep within the manpower services delivery system. Table 4 shows which of the agencies commonly included in the manpower services delivery system actually directly referred recipients to vocational evaluation services. It is appar-

Table 2. Demographic Characteristics of Vocational Evaluation Service Recipients

Characteristic	%*
AGE	
0-15	1.8
16-19	28.8
20-24	26.1
25-29	13.5
30-34	9.9
35-44	9.0
45-59	9.1 8.1
SEX	Setting (S
Male	61.3
Female	32.4
MARITAL STATUS	3811
Single	72.1
Married	15.3
Divorced	6.3
Separated	5.4
MINORITY GROUP MEM	
No Minority	52.3
Black	19.8
Chicano	2.7
Puerto Rican, Indian, Asia	

<sup>\*</sup>All data are reported for base N=111. Percents add to less than 100 because of missing data.

Table 3. Vocational Characteristics of Vocational Evaluation Service Recipients

Characteristic	%*
EDUCATIONAL LEVEL (last grade compl.)	
0-3	9.0
4-6	11.7
7-8	9.9
9-11	32.4
12	26.1
13+	9.0
JOB HISTORY	711 11-15 32
None	32.4
1 job	13.5
2 jobs	16.2
3 jobs	18.0
4 jobs	9.9
5 jobs	9.9
OCCUPATIONAL HISTORY	
Professional, Technical, Managerial	4.5
Clerical and Sales	8.1
Service	29.7
Farming, Fishing, Forestry	4.5
Processing	0.9
Machine Trades	5.4
Bench Work	5.4
Structural Work	7.2
Miscellaneous	3.6

<sup>\*</sup>All data are reported for base N = 111. Percents add to less than 100 because of missing data.

Table 4. Referral Sources of Vocational Evaluation Service Recipients

Referral Source	%*
State vocational rehabilitation	64.0
Special education	8.1
Rehabilitation facility	5.4
Hospital	4.5
State mental health agency	4.5
Regular education	2.7
WIN/Welfare	2.7
State employment service	1.8
State correctional agency	1.8
Self-referred (own expense)	0.9
Private business and industry	0.0
Private insurance carrier	0.0
Social Security	0.0
Veterans Administration	0.0
Vocational education	0.0
Workmen's Compensation	0.0
Other	8.1

<sup>\*</sup>All data are reported for base N=111. Percents add to less than 100 because of missing data.

ent that vocational evaluation services are predominantly used by the vocational rehabilitation delivery system. Earlier we suggested that a special needs group could be found within the target population of any manpower service agency. The referral source data suggest that one of two alternative possibilities may apply to explain the low utilization of vocational evaluation services by some agencies. First, it may be possible that these agencies exclude the special needs group from service so that the actual service population does not include them. Alternatively, it may be that vocational evaluation services are perceived as being appropriate primarily for a vocational rehabilitation target group. Thus, a client in need of vocational evaluation services may be referred to the state vocational rehabilitation agency which, in turn, refers the client to vocational evaluation. It is probably this cross referral process which accounts for the low direct utilization of vocational evaluation services by such agencies as Social Security and Workmen's Compensation.

Table 5 reports the handicapping or disabling conditions present in the vocational evaluation service recipients. The listing of conditions was taken from a Rehabilitation Services Administration information memorandum identifying "severe disabilities." It is apparent that vocational evaluation service recipients are severely disabled according to the RSA definitions. Additionally, two thirds of the recipients had two or more handicapping or disabling conditions.

Information was also obtained on the functional disabilities and vocational handicaps of the recipients, as reported in Table 6.

Table 5. Handicapping and Disabling Conditions of Vocational Evaluation Service Recipients

Condition	%
Mental retardation	41.4
Educational deficiency	30.6
Behavioral disorder	
Psychosis	
Economic deprivation	
Socio-cultural disadvantagement	
Visual impairment	
Delinquency or criminal behavior	
Brain damage	9.0
Orthopedic	9.0
Drug addiction	6.3
Epilepsy	6.3
Cerebral palsy	4.5
Alcoholism	3.6
Cardiac and circulatory	3.6
Paralysis	3.6
Respiratory disease	3.6
Hearing impairment	2.7
Other	12.6
None	1.8

This table reflects the fact that over two thirds of the recipients have two or more handicapping conditions.

Vocational evaluation service recipients possess a wide range of functional disabilities. Additionally, they tend to have multiple functional disabilities: in this group of clients the median number of functional disabilities per client was 10.9

Based on the data from this survey, the typical vocational evaluation client can be described as follows: The client is a single, white, male between the ages 16 and 19. He has less than a high school education and has never worked. He was referred for vocational evaluation by the state vocational rehabilitation agency. His listed handicapping conditions are mental retardation and educational deficiency. He has multiple functional disabilities which limit him vocationally, including basic attitudinal and personality problems relating to self-acceptance, self-perception, interpersonal relationships, and emotional stability. Additionally, he lacks realistic goals, decision-making skills, and knowledge relating to the job market and obtaining a job. Nagi (1974) observes that individuals such as this "who come from the lower class, and with lower educational and I.Q. levels, are ill-equipped to prevent their conditions and therefore stand to benefit from multidisciplinary and direct 'clinical' evaluations in contrast to 'paper' evaluations' (p. 49).

Table 6. Functional Disabilities of Vocational Evaluation Service Recipients

Area of Functional Disability	%
AREAS OF ATTITUDE AND PERSONALITY DISABILITIES	130714
Self-confidence; acceptance of self	55.9
Perception of self	52.3
Effective interpersonal relations	51.4
Emotional stability	47.7
Extremes in temperament (hostility, withdrawal, etc.)	34.2
Initiative	27.0
Reliability	27.0
Appearance, dress, and grooming	26.1
Perception of others	24.3
Peculiar mannerism	21.6
Overt "chip on shoulder" (short temper, defensive, etc.)	14.4
Honesty	10.8
AREAS OF VOCATIONAL MATURITY DISABILITIES	
Establishment of realistic short-range and/or long-range goals	40.5
Reasonable knowledge of job-seeking skills	40.5
Adequate level of basic education skills	39.6
Decision-making skills	37.8
Positive attitudes toward gainful employment	28.8
Ability to communicate commensurate with job expectations	27.0
Possession of physical and mental requirements for job goals	27.0
Ability to manage personal finances	24.3
Management of leisure time in a way to retain job effectiveness	24.3
Acceptance of limitation imposed on personal freedom as a	
result of employment	21.6
Understanding of age limitations, sex roles, etc., as related	
to employment	15.3
Acceptance of mobility requirements in job-seeking	12.6

Area of Functional Disability		%
AREAS OF JOB SEEKING D	ISABILITIES	
Possession of saleable job skil	1	46.8
Knowledge of job market commensurate with skills and interests		41.4
Presentation of self as a worker		37.8
Ability to cope with application and interviewing processes		33.3
Realistic expectation of job re		24.3
Ability to use community reso		23.4
Willingness to accept employe	r standards	20.7
Freedom from unrealistic pers	onal or family imposed job barriers	19.8
Effective use of transportation to the job		18.9
Acceptance of employer standards such as age, hours, etc.		12.6
Mobility		12.6
AREAS OF JOB HOLDING I	DISABILITIES	
Working up to capacity		36.0
Maintenance of stable job record		27.9
Acceptance of supervision		24.3
Mastery of skill		23.4
Willingness to improve self		23.4
Knowledge of advancement avenues		20.7
Acceptance of working conditions		17.1
AREAS OF MISCELLANEOU	US DISABILITIES	
Health problems		19.8
Financial/legal problems		17.1
Family/marital problems		15.3
Chemical dependency		10.8
Housing		8.1

In other words, the characteristics of recipients of vocational evaluation services suggest that workers in manpower service agencies would have difficulties in: (1) establishing a functional goal; (2) determining present functional competencies; or (3) establishing a course of action with these individuals without resource to some type of intensive clinical assessment procedure.

### THE GOAL AND OBJECTIVES OF VOCATIONAL EVALUATION SERVICES

As an assessment process within a service delivery system, vocational evaluation shares the common goal of assessment: to generate a course of action for the client in relation to one or more of the functional outcomes. We have observed, however, that attaining this goal is much more difficult with the special needs groups served in vocational evaluation programs than with the basic target group. To attain the goal of vocational evaluation, the entire range of functional disabilities, services, and functional outcomes must be considered.

The first specific objective of the vocational evaluation process is to identify an optimal outcome for the individual being served. This should recognize that the optimal functional outcome for an individual may not

be one of those included in the basic service delivery track of a program. For example, it is not too uncommon to find individuals within the special needs group who possibly could engage in marginal competitive employment, but whose anticipated net earnings would be less than income and benefits currently being received from an income maintenance program. In these cases, the optimal functional outcome would be something other than marginal competitive employment, since attainment of this outcome would penalize the individual.

That vocational evaluation services can lead to the identification of optimal functional outcomes other than the gainful employment outcomes typically valued by manpower service agencies is indicated by Table 7. Slightly more than one fifth of the recipients of vocational evaluation services were recommended for something other than gainful employment. At the same time, we should not lose sight of two facts. First, vocational evaluation services lead to the identification of an optimal outcome which is congruent with manpower service agency goals for the vast majority of clients served. Second, although other optimal functional goals were identified, some of the possible outcomes were not recommended for any of the clients included in this survey. A lack of recom-

Table 7. Recommended Optimal Functional Outcomes for Vocational Evaluation Service Recipients

Functional Outcome	%
COMPETITIVE EMPLOYMENT	57.6
Self-employed	0.9
Career	15.3
Long-term	11.7
Short-term Short-term	9.0
Marginal	17.1
Sub-productive Sub-productive	3.6
SHELTERED EMPLOYMENT	17.1
Transitional	6.3
Long-term	10.8
HOMEBOUND EMPLOYMENT	1.8
Self-employed	0.9
Employee	0.9
OTHER	21.6
Work activities programming—long-term	2.7
Volunteer work	0.0
Unpaid home work—care of home and other family members	0.0
Community activity—individual use of time	0.9
Programmed day activities	0.0
Homebound—individual use of time in home	0.0
Homebound—independent total self-care	0.9
Family/community assistance—partial self-care	2.7
Structured living environment—partial self-care	0.9
Total dependence on others—short-term	3.6
Total dependence on others—long-term	7.2
Not determined	2.7

mendations for volunteer work and homemaking functions is particularly noticeable, particularly since these are both socially useful activities and one of them, homemaking, is recognized as an acceptable outcome by the vocational rehabilitation system.

A second specific objective of vocational evaluation is to identify the functional competencies and functional disabilities of the individual. Attainment of this objective must take into account the optimal functional outcome for the individual and the competencies required for successful performance of activities in this outcome. This, by necessity, includes methods for identifying functional competencies and disabilities in areas other than those directly related to success in competitive or sheltered employment activities. As the definition advanced by the Tenth Institute on Rehabilitation Services (1972) suggests, this may involve the use of medical, psychological, social, vocational, educational, cultural, and economic information.

The third specific objective is to identify those services needed to overcome the functional disabilities which are barriers to successful performance of the optimal functional outcome. Attainment of this objective requires that the full range of service possibilities for the individual be taken into account. This includes not only the basic services offered within a manpower service delivery program, but also alternative services provided within the specific program being served as well as alternative services provided by other human service programs. The latter would include services provided by the other major human service delivery systems (health care and income maintenance). This requires a detailed knowledge of the available service resources. At the same time, caution should be taken to insure that only those functional disabilities which are actually barriers to success in an outcome are dealt with in service recommendations. This avoids the problem of "over treating" the client and helps to insure that the optimal functional outcome will be reached as rapidly as possible.

Table 8 details the post-evaluation service needs of vocational evaluation service recipients. It can be seen that there is a wide variety of service needs in this target group, although approximately half of the group requires a common package of vocationally related services of counseling, work adjustment, skill training, and job placement. Services provided outside of the manpower services delivery system appear to be less frequently recommended than services provided within the system. However, the data suggest that the full range of needs of the client is taken into account when services are being identified. Clients typically require multiple services: for this group a median of 5.3 service recommendations were made.

The fourth specific objective of vocational evaluation services is to reduce or eliminate functional disabilities of the individual. This is essentially a treatment objective and distinctly contrasts with the preceding three objectives, which were primarily concerned with information gathering. We have already noted that vocational evaluation differs from other assessment techniques in that it extends over a period of several

days or even weeks. During the course of vocational evaluation, then, it is likely that "treatment effects" will be found, if only for the simple reason that people in new situations usually change to accommodate themselves to the situation.

In fact there is evidence to suggest that clients change in a positive direction as a result of vocational evaluation. Gwilliam (1970) identified several direct client benefits from vocational evaluation services including greater awareness of goals, a better understanding of personal abilities, capacity, and potential, and more realistic aspirations. In a subsequent study, it was found that counselors tended to refer clients to vocational evaluation primarily because it provided the clients with an opportunity to assess their abilities and interests and to develop a more realistic perception of themselves (Nielson, 1972). Dunn and Korn (1973) found that

Table 8. Recommended Services\* for Vocational Evaluation Service Recipients

Service	%
Individual counseling	63.1 <
Vocational training	57.7
Job placement	55.0
Work adjustment services	46.8 ◀
Assessment and testing	45.0
Education (academic)	37.8€
Work experience	30.6∢
Group counseling	27.9
Recreational programming	19.8
Developmental (basic social) services	18.0
Psychotherapy	17.1
Work activities programming	15.3
Interagency coordination	12.6
Financial counseling	11.7
Income maintenance (e.g., welfare, social security)	10.8
Physical restoration	9.0
Health care	8.1
Community residence	6.3
Nutrition training	6.3
Day care programming	4.5
Drug abuse services (e.g., Alcoholics Anonymous, etc.)	4.5<
Home management training	4.5
Legal aid	4.5
Halfway housing	3.6
Institutional residency	3.6
Child care services	2.7
Family planning	2.7
Resource mobilization (advocacy and social action)	2.7
Foster home	1.8
Nursing home	1.8
Pubic health nursing	0.0
Other	9.9
None	0.9

<sup>\*</sup>Listing adapted from Morris (1973).