Critical issues pertaining to career/vocational assessment were identified by the Regional Resource Center West (RRCW) through a review of the literature and interviews conducted with practitioners. Critical issues identified were the goal of the career/vocational assessment; assessment instruments and procedures; examiner expertise; and coordination of services. Promising practices that addressed the critical issues were verified through site visits and staff interviews. The interviews were supplemented by tours, program observations and review of materials, products, and administrative procedures. Site nominations were provided by state education personnel as well as personnel from the nominated sites. Promising practices were selected through the criteria of identified critical issues, uniqueness, feasibility of replication, effectiveness, and cost-effectiveness. Eight promising practices were identified in California and Florida, and are described in this report. For each practice, the following information is given: site, contacts, sphere, critical issue, program descriptions, background of problem, description of practice, implementation/maintenance, outcomes, resources required (staff, equipment, training, funds), learnings, person to contact for further information, and person who verified practice. (KC)
CAREER/VOCATIONAL ASSESSMENT
OF
SECONDARY STUDENTS WITH EXCEPTIONAL NEEDS:
CRITICAL ISSUES AND PROMISING PRACTICES

Developed by:
Lyn Starr Anderlini
Gail Zittel

a cooperative effort of the
Regional Resource Center West
University of Southern California
Los Angeles, California

and the
California State Department of Education
Office of Special Education

March, 1982

This material was produced by the Regional Resource Center West, under a contract with the Department of Education, Special Education Programs. However, the opinions expressed herein do not necessarily reflect the position or policy of the United States Department of Education, and no official endorsement should be inferred.
A major responsibility of the Regional Resource Center West (RRCW) is to assist the Arizona, California, Hawaii and Nevada State Offices of Special Education in their efforts to implement programs for every special education student. Toward this end, the RRCW has conducted a detailed needs assessment with the California Office of Special Education and negotiated the specific nature of the technical assistance to be delivered to the state.

In its continuing effort to improve the quality of career/vocational education services available to secondary students with exceptional needs, the California Office of Special Education requested the identification of promising career/vocational assessment practices. This report was developed in response to the state's request. A cooperative effort between the staff of the RRCW and the California Program Review Unit resulted in the description of critical issues and the identification of the promising practices included in the report.

Critical issues pertaining to career/vocational assessment were identified through a review of the literature and interviews conducted with practitioners. Promising practices which addressed the critical issues were verified through site visits and staff interviews. The interviews were supplemented by tours, program observations and review of materials, products, and administrative procedures. Site nominations were provided by state education personnel as well as personnel from the nominated sites.

The criteria used to select promising practices included the following:
- Does the practice address an identified critical issue?
- Is the practice unique?
- Is replication of the practice feasible?
- What evidence of effectiveness is available?
- Is the practice a cost-effective approach?
This report represents a small sample of the effective vocational assessment practices being implemented in California and across the nation. Further documentation of promising strategies and practices will be added to this report if funds and time permit. Dissemination of this report is being carried out by the California Office of Special Education.

Additional dissemination of the verified promising practices is being provided by the Regional Resource Center Network. In conjunction with providing technical assistance to state education agencies, the RRCN is participating in a Regional Resource Center system-wide effort to identify effective practices that aid the education of handicapped students. The focus of the RRCN is on the identification of sites which effectively address the problems and issues pertaining to child identification and educational evaluation.

The career/vocational evaluation assessment of secondary students with exceptional needs is a priority for state education agencies throughout the country. It is hoped that this report will assist other state and local education personnel to successfully implement career/vocational education services for all handicapped students.
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A large population of secondary students with exceptional needs is excluded from career/vocational assessment and instructional programming services.

**INTRODUCTION**

**Importance**

In the past decade, the career and vocational education of students with exceptional needs has received increasing emphasis. The inclusion of students with exceptional needs in career/vocational programs has increased most recently in response to several developments. Surveys conducted in junior and senior high schools confirm that students are not being taught independent living skills or the specific technical skills needed to become employable. Studies indicate that the unemployment rate among disabled persons far exceeds the unemployment rate among the rest of society. Furthermore, many who do hold jobs are in marginal positions, often working below their capacity. In response to this situation, state and federal legislation mandated the provision of career and vocational services for disabled students.

P.L. 94-142, the Education of All Handicapped Students Act of 1975, requires the development and implementation of an Individualized Education Program (IEP) for each disabled student. The IEP is the designated vehicle for setting forth appropriate educational goals for each handicapped student along with the types of services that are to be provided to foster attainment of the goals.

P.L. 94-482, Vocational Education Amendments of 1976, mandated that vocational goals and services must be planned and coordinated as part of the student's IEP. At appropriate times in the student's education, the IEP must include valid and reliable career or vocational information. This information is to serve as a basis for 1) the formulation of the student's vocational goals and objectives, 2) placement
decisions, and 3) decisions about needed curricular adaptations. Among
the vocational services available to handicapped students under this
law are vocational instruction; curriculum development and modification
to enable handicapped students to take part in regular programs;
modification of vocational equipment to enable students to develop
skills leading to employment; vocational or work evaluation; supportive
services such as interpreters, note-takers, readers, or tutorial aides;
vocational guidance and counseling; and job placement and follow-up
services.

Section 504 of P.L. 93-112, the Rehabilitation Act of 1973, is the
third piece of legislation that forms the basis for the provision of
vocational services for handicapped individuals. This act is a civil
rights law: It prohibits discrimination on the basis of handicap in
any private or public program receiving federal financial assistance.
The effect of this legislation on the career/vocational education of
handicapped students is that they can no longer be excluded from such
programs because they are handicapped.

According to these laws, handicapped youngsters must receive, to
the greatest extent possible, vocational education in regular vocational
classrooms, with the supportive services and aids they need in order to
succeed. In order to provide handicapped students with appropriate
vocational educational programs, accurate and relevant vocational
assessment information about each student must be available. The non-
discriminatory assessment standards and procedures mandated by
P.L. 94-142 for general psychoeducational assessment also pertain to
vocational education assessment (see Appendix A for the specific pro-
visions mandated by these regulations).
Currently, accurate and comprehensive vocational assessment exists in only a few school programs. However, a commitment to incorporating accurate career/vocational assessment as an integral part of instructional programming is emerging. The necessity for systematic, long-range career/vocational assessment of disabled students is imperative. The student's abilities and vocational potential should be reassessed as he/she explores career and vocational choices. The consequences of not providing accurate assessment are sobering in light of the impact this can have on a student's future employment opportunities.

Unemployment or marginal employment for disabled persons places an economic burden on society as well as on the families of these individuals. It leads to the waste of talent and fosters dependency and idleness.

**Difficulties**

Although the legislation mandating vocational services for disabled students is quite extensive, there are numerous problems that impede implementation. An examination of the issues relating to accurate and comprehensive career/vocational assessment of secondary students is important. A discussion of promising practices that address these issues can assist others to identify and meet the vocational needs of secondary disabled students.

**ISSUES AND PRACTICES**

**Goal of Career/Vocational Assessment**

The goal of a career/vocational assessment must be clearly understood before assessment instruments are chosen. The choice, implementation, and interpretation of assessment activities have the potential to impact the student's chances for future employment.
are differences of opinion regarding the purpose of assessment. Selection and classification resulting in job placement is often considered the primary function of assessment. This type of assessment is usually performed with high-school students who are close to graduation. Conversely, many educators view vocational assessment as an opportunity for the student to explore and understand his/her potential in relation to work environments. Assessment is considered a part of a counseling and guidance process which assists the student in making realistic career choices. This approach is a continuous, comprehensive, student-centered process beginning in junior high school or earlier.

In light of the evidence that many disabled students have incomplete or distorted perceptions of the world of work, an exploratory student-centered assessment process would appear to be the most appropriate goal.

The Career and Vocational Education Unit at the Riverside County Office of the Superintendent of Schools (p. 21) conducts a student centered assessment process which enables the student to expand the range of occupations he/she considers. The interpretation session is viewed as a discussion period rather than a description of results. The goal of the assessment process is to gain guidance information for a student’s consideration and not prescriptions for a specific occupational choice.

The Rehabilitation Training and Evaluation Program at Rancho Los Amigos Hospital in Downey, California (p. 37) performs an assessment which involves a systematic, information-gathering, and decision-making process. The goal of this process is to assist the individual to learn more about him/herself in relation to the world of work.
Assessment Instruments and Procedures

Career/vocational assessment encompasses a variety of informal and formal evaluations of the interests, abilities, and work-related temperament of a student. Through this process, a student gains a greater understanding of his/her interests, abilities, and the work environment best suited to him/her. Assessment procedures include paper/pencil tests, manipulative tests, work samples, situational assessment, prevocational exploratory courses, and the student's reactions to vocational skill courses and work experience situations. In order for the student to make a realistic career choice, he/she must be actively involved in the assessment process.

Careful consideration should be given to the selection of standardized instruments for use with handicapped students. They must be valid for the purposes intended and reliable for use with students with particular handicaps. The benefit of standardized instruments is that they can be administered easily and economically. But, these instruments tend to have low predictive validity. Furthermore, many handicapped students must have verbal assessments or assessments that are not timed, or other accommodations made in order to get an accurate picture of their abilities or interests. Many of the more severely handicapped students have had little work-related or social experiences. The restriction of their previous experiences make many of the interest inventories inappropriate.

One way of making standardized vocational instruments more appropriate for certain handicapped populations is to individualize the administration of the instruments and interpret the results on the basis
of local criteria and knowledge of the handicapped individual. The Vocational Assessment Center in San Diego, California (p.44) has developed an interest inventory and a basic skills test. The Slide Presentation Of Careers (S.P.O.C.) consists of a series of photographic slides taken of people performing a variety of jobs in the San Diego area. The student views the slides and indicates which of the occupations are of interest. The staff also designed the Basic Readiness Skills Inventory to assess the math and reading skills needed to work and live independently. The results of these criterion-referenced measures are used to develop instructionally relevant programs.

An alternative to using standardized instruments is to assess a student's vocational interests and abilities through such techniques as performance observations, teacher reports, parent judgments, anecdotal records, and interviews with the student.

The Rehabilitation Training and Evaluation Program at the Rancho Los Amigos Hospital in Downey, California (p.37) provides a vocational assessment that incorporates information such as medical and work-history, family and social background, and ability or intellectual functioning level. In order to obtain further information about present functioning level or intellectual capabilities, observations are made of the way a client behaves when attempting to complete simple tasks devised by the staff. Furthermore, staff members spend time discussing with the client his or her temperament style and how it will be a benefit or an impediment to different types of employment.

The assessment of a student's vocational interests and aptitude through the use of work sampling has become increasingly popular. Work samples are tasks or activities that simulate a specific job and are used to assess interests, skills, and abilities similar to those required in competitive employment situations.
Factors that adversely affect test scores are less likely to influence work samples: insufficient motivation, excessive anxiety, cultural differences, or language disabilities. Consequently, work samples may be a more appropriate way of assessing the vocational skills and interests of many handicapped learners. It is also believed that a more realistic picture of an individual's work potential is obtained from work sample evaluation than from psychological testing.

The drawbacks of the work sample evaluation process are that the procedures tend to be expensive, time consuming, and little useful information is provided that assists in instructional programming. Other considerations which may affect the appropriateness of using a work sampling process are:

- tasks within the work sample system may not reflect the availability of occupations within the community, particularly in rural areas.

A lack of work samples which could be used to assess one of the dominant occupations in the area prompted the Highlands County School Board Work Evaluation Center, Sebring, Florida (p. 26) to develop farming-related work samples.

- tasks may only represent a few of the skills needed for a particular job.

The staff of the Career and Vocational Education Unit, Office of Riverside County Superintendent of Schools, Riverside, California (p. 21) analyzes the skills needed for a particular job and expands the work samples to include additional skills.

- typical mode of presentation, i.e., video, or verbal instruction used in work sampling may not be appropriate for many students who have difficulty following directions or have vision or hearing impairments.
few systems provide reliability or validity data for interest scores.

- tasks are often one-trial measures which offer little opportunity to develop strategies to perform the tasks. Factors, such as a lack of sleep, recently employed friends, problems with family or friends, which may affect the student's performance are not taken into account by a once-a-year assessment procedure.

- tasks are performed in controlled settings which do not accurately reflect the environmental conditions which exist on a job.

- solo evaluator technique is emphasized, contradicting the mandates for input from additional personnel or instruments.

Nevertheless, the use of work samples is thought to give a more comprehensive picture of a student's vocational potential.

The Work Evaluation Center at Leto High School, Tampa, Florida (p.30) provides an occupational exploration component as part of the program. The occupational exploration component was designed to provide direct hands-on experience with tools and materials and work simulations common to a broad cluster of occupational areas. The program component is designed to assist persons with special needs to identify vocational interests and skills, and to aid them in making and adjusting to occupational choices for training. The instruments used include the VALPAR, Singer, Project Discovery, and some homemade samples.

Other centers which adapt or include work samples as part of the assessment process are: Vocational Assessment Center, San Diego, California (p.44); Career Assessment and Placement Center, Whittier, California (p.17); Highlands County School Board Work Evaluation Center, Sebring, Florida (p.26); Career and Vocational Education Unit, Riverside, California (p. ).

In addition to paper and pencil instruments and work samples, data is collected through job performance assessments. Efforts have been made to focus the evaluation process as close as possible to the work setting. Increased emphasis has been placed on using the regular
vocational skill courses, and exploratory and paid-work experience
situations as assessment sites. Ruggenberg Career Training Center in
Bakersfield, California (p. 40) offers an on-going job performance assess-
ment. At the Career Assessment and Placement Center, Whittier, California
(p. 17) students may visit a job or training site for a one-to-five day
work tryout to explore interests and vocational needs.

Examiner Expertise

Only a small number of professionals are adequately trained in
vocational assessment or evaluation. Even a smaller number are trained
to work with handicapped individuals. Most preservice training programs
in special education or vocational education do not prepare students for
conducting a vocational evaluation. There are only a few colleges or
universities around the country that offer programs in vocational
assessment or evaluation of handicapped students. The vocational
evaluator employed by the Career and Assessment Center, Whittier,
California (p. 17) has received specialized training and a Master's
degree from the University of Wisconsin-Stout, which has a graduate
program with emphasis in vocational evaluation. However, most career/
vocational education programs do not have personnel with graduate training
in vocational evaluation.

Since so few trained personnel are available, many practitioners
with diverse backgrounds and experiences have been used to perform
vocational assessments. The Vocational Assessment Center, San Diego
City Unified School District, San Diego, California (p. 44) uses graduate
student interns from the Vocational Rehabilitation Counseling Department
at San Diego State University to conduct assessments. Vocational
assessments are performed by assessment technicians with the assistance of the occupational assessment counselor at the Career and Vocational Education Unit, Office of Riverside County Superintendent of Schools, Riverside, California (p. 21). The assessment technicians are para-professionals who were trained to complete informal and formal assessment activities by the counselor. Interpretation and instructionally relevant recommendations are the major responsibility of the occupational assessment counselor. In addition, the Center staff has designed and conducted in-service training in order to build the capacity of district level IEP teams to perform vocational assessments.

The Office of Santa Clara County Superintendent of Schools, San Jose, California (p. 33) has actively involved teachers and administrators in the assessment process. Through county-sponsored in-service training, school personnel have been taught to conduct and interpret assessments and to develop career/vocational goals.

Unfortunately, limited in-service opportunities are available for personnel to improve their skills. In-service opportunities should provide training in such areas as the theories of assessment and work adjustment, the labor market, the administration and interpretation of assessment instruments, the development of work samples based on detailed task analysis, and the adaptation of tests and materials for handicapped persons.

Coordination of Services

Career/vocational education and special education programs, at both the state and local levels, operate separately. Administrators of these programs may hardly know one another. Furthermore, vocational
rehabilitation is considered outside and removed from the concerns of the school system.

Each of these disciplines -- special education, vocational education, and vocational rehabilitation -- have critical information and knowledge that are important for developing a quality vocational education assessment process. Furthermore, the participation and involvement of special education, vocational education, and vocational rehabilitation will help to insure that the vocational needs and goals of handicapped students will be taken care of through an appropriate continuum of services. Many people are not aware that the services provided by vocational rehabilitation can contribute to the career preparation of handicapped high school students.

Vocational rehabilitation counselors at the Vocational Assessment Center, San Diego, California (p. 44) perform vocational assessments, provide interpretation of results, develop instructional recommendations, and participate in IEP meetings. Furthermore, a cooperative agreement has been formulated between the Department of Rehabilitation and the San Diego City Schools, Department of Special Education.

The Highlands County School Board Work Evaluation Center, Sebring, Florida (p. 26) came about as a result of a cooperative arrangement between the Department of Rehabilitation and the Highlands County School Board. Both secondary students, grades 7-12, and adults are evaluated at this Center. In addition, other work-related services are provided at the Center for adults free of charge. The Career Assessment and Placement Center in Whittier California (p. 17) is a prime example of coordinated and comprehensive planning among personnel from special
education, career/vocational education, and the department of rehabilitation for the purpose of providing vocational education services.

**PRACTICE COMMONALITIES:**

An analysis of the information provided by the sites revealed commonalities among the practices that were being used to address issues pertaining to the career/vocational assessment of handicapped students. The following practice commonalities are categorized according to the issues concerning assessment instruments, examiner expertise and coordination of services.

**Assessment Instruments**

- To compensate for the limitations of assessment instruments, LEA personnel have developed instruments to meet their needs (e.g., criterion-referenced assessments which are related to specific tasks needed to complete a job; work samples, representative of community employment opportunities).
- Emphasis is being placed on using instructionally relevant assessment instruments and techniques.
- Observations in a variety of settings, and interviews with students and parents are being used to provide more comprehensive pictures of those being assessed.

**Examiner Expertise**

- LEAs are providing inservice training programs for psychologists, teachers, administrators, and other personnel involved in the assessment process to increase examiner expertise.
- LEAs are using interns and technicians to perform the assessment. Personnel with formal career/vocational assessment training interpret the results and develop the programming recommendations.
Coordination of Services

- Collaboration among personnel from special education, career/vocational education, and the department of rehabilitation has resulted in a comprehensive assessment and programming process.
- LEAs are bringing together vocational rehabilitation counselors and special educators so that career/vocational assessment is viewed and implemented as an integral part of the instructional process.

POTENTIAL IMPROVEMENTS

Discussion with site personnel led to the following statements regarding potential improvements which might be made in the career/vocational assessment process.

Examiner Expertise

- Links between assessment results, curriculum development, and implementation of career/vocational education services should be strengthened.
- Communication of the assessment results to students, parents, and instructional personnel should be increased.
- LEA personnel need more opportunities for educational training in the career/vocational assessment of secondary students.
- Competencies required to perform career/vocational assessment should be established.

Assessment Instruments and Procedures

- Assessment personnel should solicit and increase the use of observational data provided by the classroom teacher.
- Increased communication with the student's parents is needed prior to and during the assessment process.
Additional procedures need to be developed to provide information concerning curriculum modifications, teaching techniques, and student learning characteristics.

Time for visiting other quality sites and studying their assessment procedures would be helpful to assessment personnel.

Additional procedures need to be developed to provide information concerning curriculum modifications, teaching techniques, and student learning characteristics.

Time for visiting other quality sites and studying their assessment procedures would be helpful to assessment personnel.

Selection of assessment instruments (e.g., work samples) needs to be more closely linked to the identified interests and strengths of the student.

Coordination of Services

Clarification of the role of the special education teacher, the vocational rehabilitation counselor, and the vocational teacher in the assessment process is needed.

Other

Earlier initiation of career and vocational education services, including assessment, is needed.
INDEX TO PROMISING PRACTICES

If you're having a problem with the career/vocational assessment of handicapped students...

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Assessment Instrument and Procedures

Job performance assessment

Examiner Expertise

A university trained vocational evaluator

Using graduate student interns to conduct assessments

Using paraprofessionals to conduct assessments

Training teachers and administrators to conduct assessments

Coordination of Services

A cooperative agreement between a Department of Rehabilitation and a City Schools' Department of Special Education

A cooperative arrangement between a Department of Rehabilitation and a County School Board

Coordinated planning among personnel from Special Education, Career/Vocational Education, and the Department of Rehabilitation
Site: Career Assessment and Placement Center, Whittier, California

Contacts: Dan Hulbert, Rehabilitation Service Administrator
         William Bramlett, Psychologist
         Linda Tyler, Vocational Evaluator

Sphere: Child Identification and Educational Evaluation

Critical Issue: Assessment Instruments and Procedures: Work samples, work tryout
Examiner Expertise: University trained vocational evaluator
Coordination of Services: Coordinated planning between several departments

Program Description: The Career Assessment and Placement Center is a joint effort of the Whittier Union High School District, the Whittier Area Cooperative Special Education Program, and the California State Department of Rehabilitation. Started in December of 1979, the Center provides services to individuals diagnosed as having a physical, mental, or emotional disability who have minimal self-care skills and are junior high school age or older.

Twenty-three staff provide the following services:

- Career education experiences which introduce the world of work to special needs students are planned and offered to elementary, junior high and senior high school students.

- Vocational Counseling is provided to assist students and parents in developing vocational goals, to coordinate services, and to follow-up after students are placed.

- Vocational evaluation is provided to systematically determine feasible vocational objectives for a client. Information obtained through the evaluation process is shared with all appropriate parties and used to develop the vocational plan.

- Work adjustment services are provided on an individual or group basis. Instruction in areas such as job seeking skills, mobility training, or academic tutoring may be provided at the Center, or on a job training site, school site, or employment site.

- Independent living skill instruction is provided in a combination of classroom and community experiences. Areas covered include mobility training, consumer skills, community awareness, homemaking skills, communication skills, and leisure time activities.

- Job development and placement are also provided.

Background of Problem: The initial problem was the lack of good vocational education experiences for the secondary special education population in the district. Program emphasis focused on the provision and/or coordination of comprehensive services to assist handicapped persons in reaching their optimum functioning level. This required that the vocational plan and services provided each student be highly individualized. A comprehensive evaluation was considered a prerequisite to the development of the vocational plan.
Description of Practice: The practice is a systematic-comprehensive vocational evaluation that focuses on assisting clients in determining realistic vocational goals. The assessment process involves the following procedures:

- First, the client is interviewed to identify previous work experiences, interests, work needs, and job expectations.
- Psychological tests may be administered to obtain additional information regarding the individual's intelligence, academic achievement, personality characteristics, interests, and aptitudes.
- Then, the client selects tasks of interest from work samples in a variety of job areas. The client's performance on and attitude toward each work sample is noted.
- The client may visit a job or training site for a one-to-five-day work tryout to explore interests and vocational needs.
- Finally, staffing is held to discuss the results of the evaluation and to develop the vocational plan. The evaluator, classroom teacher, vocational counselor, referral source, parents, and client may all attend as appropriate.

Implementation/Maintenance: Directors of Vocational Education, Special Education, and the Consortium reviewed services provided for special education. They determined through a needs assessment that no coordination of effort was taking place. There was no plan for spending Vocational Education and P.L. 94-142 discretionary funds.

The committee met with a Rehabilitation Consultant who suggested they find a Rehabilitation Coordinator. A Coordinator was hired in October, 1979 following a national search. He then selected a staff and the Center was opened in December, 1979.

Outcomes:

- The Vocational Plan is based on a combination of student aptitude, interests, and performance characteristics.
- The Vocational Plan is developed by individuals who have a thorough knowledge of each student.
- Student progress is monitored every two weeks.
- Students receive individualized services until they are placed.

Resources Required:

Staff:  
- Program Coordinator - with solid background in Rehabilitation Services
- Career Educators
- Vocational Counselor
- Vocational Evaluator - with specialized training and a Master's degree in the area
- Work Adjustment/Resource Specialist
- Independent Living Skills Instructor
- Rehabilitation personnel on site
- Job Development/Placement Specialist
- Psychologist
- Vocational Technicians

**Equipment:** Singer work sample stalls

**Training:** Emphasis on staff having Rehabilitation experience or Special Education background.

**Funds:** The annual budget to run the project is approximately $700,000 a year. $150-200,000 was used for initial set-up. Approximately $100,000 a year is needed for staff salaries, and ongoing materials and equipment costs per year. Sources of funds include:

- Vocational Education set aside (10%)
- Master Plan
- Rehabilitation Counseling Services
- Career Education, Incentive Act Grant (in-service)
- ESEA IV-C Replication Grant
- CETA
- Rehabilitation and state pays for adult clients

**Learnings:**

- Vocational evaluators need to have strong observational skills and have to be firm and critical in evaluation because they take on the role of the employer in the training situation.

- A maximum of 15 students can be accommodated at a time when working through evaluations.

- The Vocational Evaluator should have a Masters degree in vocational evaluation.

- The earlier the initiation to careers and vocational education the better; therefore movement toward involvement in lower grades (elementary) is recommended.
For Further Information Contact:

Dan Hulbert
Career Assessment and Placement Center
9401 South Painter Avenue
Whittier, California 90605
(213) 698-8121

Practice Verified by: Site visit on March 25, 1981
Janice Frost, RRC Interviewer
Lyn Starr, RRC Interviewer
Site: Career and Vocational Education Unit, Division of Special Schools and Services, Office of Riverside County Superintendent of Schools, Riverside, California

Contacts: John Grisafe, Occupational Assessment Counselor
Patricia Barrett, Career and Vocational Education Resource Specialist
Alan Schwerdt, Career and Vocational Education Resource Specialist

Sphere: Child Identification and Educational Evaluation

Critical Issue: Goal of Career/Vocational Assessment: Assessment as a guidance process
Assessment Instruments and Procedures: Work samples representing extensive job analysis
Examiner Expertise: Using paraprofessionals to conduct assessments

Program Description: The Career and Vocational Education Unit serves junior and senior high school students with various disabilities, including mental retardation, sensory impairments, and orthopedic handicaps and cerebral palsy.

Presently, it is funded through the California State Department of Education. The program is operated by the Office of Riverside County Superintendent of Schools, Division of Special Schools and Services, and is in its third year of operation.

The staff consists of:
- a coordinator - County;
- an occupational assessment counselor - County;
- 3 career/vocational education resource specialists - County;
- 2 career/vocational education specialists - District;
- 2 assessment technicians - County;
- 2 teacher's aides - 1 with County, 1 with District;
- secretary.

The Career and Vocational Education Unit is specifically responsible for the following services:
- vocational assessment;
- career education;
- career and vocational curriculum development;
- staff development in the areas of:
  - vocational assessment,
  - job placement,
  - career and vocational education,
  - job training,
  - vocational skill building,
  - vocational curriculum development.

Eighty percent of the students assessed by the staff are enrolled in the 126 County operated programs. The other twenty percent assessed are students enrolled in the 16 district high schools.
Background of Problem: A large population of secondary students with exceptional needs were not included in career and vocational education programs. State and federal legal mandates provided the impetus to develop and improve career and vocational education assessment and programming for these students.

Many of the students enrolled in county programs and district high schools had distorted or minimal awareness of their career/vocational potential and the world of work. Therefore, the goal of the occupational assessment counselor and the career/vocational resource specialists was to design an assessment process which focused on potential and skill building.

Description of Practice: The practice is a career/vocational assessment designed as a guidance process which provides the student with information about his/her potential and the world of work. This assessment process is viewed as an integral part of programming and is interactive with instruction. The commitment of the staff is to the development and refinement of an ongoing assessment process which:
- provides the student and parents with information valuable for further investigation of the world of work;
- provides the assessment and instructional staff with information useful in developing a program or curriculum which is of interest and lasting importance to the student.

The assessment is performed by two assessment technicians with the assistance of the occupational assessment counselor.

Prior to formal assessment, the staff requests the teacher's observations of the student's ability to attend to and complete tasks as well as observations of his/her social behavior. The teacher's observations of the student's physical stamina are also recorded. The information is reviewed and an appointment with the student is scheduled. The student is interviewed to determine his/her interests, expectations, and work experience.

The information gained from the teacher's observations and the student interview assist the counselor in the selection of the assessment instruments. Another factor influencing the selection of assessment instruments is the student's potential for community employment.

Different assessments are performed with students who will be working in community versus non-community settings, such as sheltered workshops. Regardless of the student's employment potential, the vocational interests and abilities of all students are assessed.

Interest inventories are administered before assessments of ability. This practice is followed to encourage the student to consider and to explore a wide range of occupations. An interest inventory which is administered to students with a reading level of at least fourth grade and the potential for community employment is the California Occupational Preference System (COPS). To assess the prerequisite skills or potential of these students to perform various occupations, the staff uses the Career Ability Placement Survey (CAPS). This occupational ability assessment is often supplemented with a measure of dexterity, such as the Minnesota Rate of Manipulation Test or the Purdue Pegboard.
Students with a reading level below the fourth grade, with the potential for community employment are administered one or more of the following interest inventories:

- Wide Range Interest Opinion Test (WRIOT);
- Pictorial Inventory of Careers (PIC);
- Picture Interest and Exploration Survey (PIES);
- California Occupational Preference System (COPS);

(questions are read to the student).

To assess the vocational interests of students for whom non-community employment is the most feasible option, the staff relies on informal questions with emphasis on a counseling approach. Interest inventories performed with this population include the WRIOT, Valpar-12 Prevocational Readiness Interest Inventory, and an adaptation of the PIC. The PIC is adapted by the elimination of the film slides which require reading. Students are also instructed to answer yes or no rather than rating the occupations on a five-point scale.

To assess the ability of these students to perform in various work settings, i.e., day care, work activity, sheltered workshops, the staff uses the McCarron-Dial system and the Valpar Prevocational Readiness Battery.

Worksamples, which evaluate the student's potential for specific occupations are available on an as-needed basis. Valpar and the Micro-Tower worksamples are available.

Once the assessment has been conducted, the counselor:

- reviews information gained through observation and the assessment instruments;
- reviews the scoring;
- requests any needed clarifications;
- writes instructionally relevant recommendations with input from assessment technicians;
- discusses the recommendations with assessment technicians and vocational resource specialists; and,
- sends recommendations to the referring party, resource specialist, psychologist, and coordinator (site principal).

The program coordinator, psychologist, or the teacher presents the assessment results and recommendations during the IEP meeting. The occupational assessment counselor is available to the IEP team for additional consultation.
The career/vocational resource specialists assist the teachers to implement the career and vocational components of the IEP. The specialists provide pre-vocational curriculum materials, consultation, and staff development.

To prepare students for competitive employment, vocational skill building classes have been developed by the resource specialists.

Implementation/Maintenance: The Career and Vocational Education Unit began in the Fall of 1979. P.L. 94-142 discretionary funds enabled the staff to develop and implement the assessment process. Portions of the discretionary funds were used to purchase assessment instruments and equipment and to pay the salaries of the counselor and two career/vocational resource specialists.

The occupational assessment counselor interviewed professionals from the Department of Rehabilitation, the Comprehensive Employment and Training Act programs, sheltered workshops, private agencies, universities, and districts. He also reviewed over 160 assessment instruments and completed a review of the literature. As a result of this investigation, the counselor designed an assessment process which would focus students on expanding their interests and strengthening their potential.

The process was piloted and refined by the occupational assessment counselor with the assistance of the career/vocational resource specialists during a six month period.

During the first year, the counselor designed a vocational assessment inservice for resource specialists, special day class teachers, and psychologists. The objectives of the inservice were:

- to build the vocational assessment skills of participants; and
- to increase the participants' understanding of the results of vocational interest and ability assessments.

The objectives were achieved by providing each participant with an opportunity to assess 10-20 students. As a result of this inservice, the vocational interests and abilities of 552 students were assessed. District personnel received 7,110 assessment protocols.

During this time the Vocational Assessment Handbook was developed which outlines over sixty common assessment instruments.

The use of a computer and a word processing machine has streamlined the scoring and reporting of assessment results. The staff has increased their understanding of the significance of various test items and assessments. They are now able to generate more instructionally relevant information from the assessments.

Outcomes: The major advantage of the assessment process is that it is designed to be an integral part of an instructional programming process. A special feature of the process is the opportunity it affords students with exceptional needs to explore and expand their occupational interests and skills. In addition, personnel from county operated programs have expressed a more positive view of their student's vocational potential.
Evidence of the effectiveness of this assessment process is as follows:

- A significant number of students with exceptional needs have been assessed (approximately 900).
- The number of students with exceptional needs included in career/vocational education programs has increased significantly.

An in-depth evaluation of the assessment process is planned for June of 1982.

Resources Required: Currently the staff is using the county's computer and word processor as well as a microcomputer to norm, translate, and print the assessment results. The occupational assessment counselor estimated that it would cost a district $2,000 to replicate the assessment process. Two hundred students have been assessed annually for approximately $2,000. If a district was interested in using word and data processing, he estimated the initial costs would be approximately $25,000.

Learnings: Improving the assessment process might include:

- Strengthening the links between assessment results, curriculum development, and implementation of career/vocational education services.
- Increasing the communication of the assessment results to the students, parents, and instructional personnel.
- Increasing working relationships with other agencies, i.e., Department of Rehabilitation, Employment Development Department.
- Making more efficient use of data and word processing equipment.

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Practice Verified by: Site visit on January 19, 1982
Lyn Starr, RRC Interviewer
Regional Resource Center West
Effective Practice

Site: Highlands County Board Work Evaluation Center, Sebring, Florida

Contact: Gary Lee, Vocational Education Coordinator

Sphere: Child Identification and Educational Evaluation

Critical Issue: Coordination of Services: Cooperative arrangement between a Department of Rehabilitation and a County School Board

Program Description: The Highlands County School Board Work Evaluation Center was established in 1976. It presently serves a three-county rural, agricultural area. The students evaluated in this Center have various handicapping conditions, including educational mental retardation, severe learning disabilities and physical handicaps. Approximately seventy-five students and 170 adults are evaluated annually. Transportation for students to the Center is provided by the county in which they reside. All services provided are free.

The Work Evaluation Center also provides free services for adults from the Department of Rehabilitation, HETA (Health and Manpower Consortium Act), Alcoholism and Treatment, Mental Health, Avon Park Correctional Institute, Ridge Area Association for Retarded, and Employment Services.

Background of Problem: In the early 1970s, the Department of Rehabilitation had a cooperative program with the Highlands County School Board. The Vocational Rehabilitation counselors influenced the initiation of a vocational assessment center that would serve students who were eligible for vocational rehabilitation services.

Description of Practice: The assessment process is sequentially oriented starting with a written referral from the school of residence. The referral is reviewed by an evaluator for information about why the referral was made, whether the student has had any work experience or vocational training, and whether aptitude, interest, or intelligence tests recently have been given. After the referral is processed, the student is given an orientation to the purpose and process of work evaluation and interviewed to learn about personal interests, goals, and to understand other family or social background.

The assessment process is described to clients as "providing information that will help you make better decisions," a way to "help plan your own career, your future."

The next phase is called the "paper testing stage" where tests are given to assess interests, intellectual aptitudes, intelligence, academic and living skills, and career exploration. Some instruments used include Florida VIEWS, COATS, SINGER, TABE, PIAT, SRA, Peabody Picture Vocabulary Test, parts of McCarron-Dial and the Holland RIASEC. Students whose files contain adequate assessment data in the requisite areas typically are not retested.
The third phase is considered "hands on aptitude" where the evaluation primarily is based upon performance on work samples. The Center includes a full complement of work sampling devices, including Bennett Hand Tool, Crawford Small Parts Test, HESTER, Purdue Pegboard; Minnesota Rate of Manipulation, Singer Evaluation System, COATS, Valpar Component Work Samples, Micro-Tower, and specially designed assessments for lifting, hand strengths, perceptual accuracy, response-orientation, spatial relations, etc. The work samples typically used for secondary students are the JEVs, VALPAR, SINGER, and parts of the COATS. During this third phase, work attitudes, performance, and speed are evaluated.

After hands-on testing, a discharge consultation is held with the student and a report is prepared. A meeting is then scheduled that includes the student and the Work Evaluation Center Staff in which recommendations are made for curriculum modifications, placements, on-the-job training, or further evaluation.

The staff at the Center, primarily involved in vocational assessment includes a lead work evaluator, a work evaluator, and two technician aides.

The evaluation process takes one to two weeks. Students who have been referred for vocational assessment will be evaluated up to three times. The assessment process begins in the 7th grade and continues throughout the high school years.

Implementation/Maintenance: The Work Evaluation Center was started initially to serve educationally mentally handicapped students at Sebring Middle School. The Center then was moved to a preschool before being housed at its present location.

Perhaps the major factor that contributed to the implementation and maintenance of the Center is the close, cohesive relationship that exists between the Special Education and the Department of Rehabilitation staff. Consequently, the staff is able to offer a wide variety of individual assessment plans. Clients are encouraged to take non-traditional work samples and to engage in outreach work with community agencies.

Since the implementation of the Center, there have been several Vocational Education Coordinators. According to some of the staff members, the change of coordinators has prevented stagnation and provided new viewpoints.

All of the current staff members have taken a two-week staff development vocational evaluation workshop, provided through the University of South Florida by Dr. Allen F. Kerns. This inservice training, available to the Center staff members at no cost, was cited as a catalyst for improving the Center's effectiveness.

The Vocational Education Coordinator has the responsibility for maintaining the Vocational Assessment Program. However, staff initiative is encouraged and pride of ownership in the assessment process is apparent from the entire staff.

Outcomes: Some informal data is collected to determine the effectiveness of the assessment process. During the exit interview, students are questioned about which work samples they found most beneficial. This information is helpful for the evaluator in assessing the effectiveness of the assessment process.
In an effort to identify the types of recommendations typically made to students who undergo a vocational assessment, an evaluation of student records was done. A random sample of 53 student records of those who received a vocational assessment between 1979 and 1981 were evaluated for this study. The study showed that at least 70% of the recommendations focused on the need for increased academic functioning and suggested further evaluation of achievement in such areas as reading, making change, and linear and liquid measuring, for example. Furthermore, a great percentage of the recommendations included specific suggestions for vocational training.

More follow-up information is needed to determine the impact of the vocational assessment process. The number of migrants served by the Center and the mobility of farm workers in the counties has been a problem in getting such data.

An unexpected spinoff of the Center's work in vocational assessment has been the development of local workshops in the community, on job seeking and career exploration. In addition, special educators have improved curriculum to be more occupationally relevant and to develop life skills.

Resources: The financial resources for the Center come from P.L. 94-482, Subpart 2, VEA-funds, as well as state and local aid. A vocational rehabilitation innovation expansion grant provided some funding to initiate the Center.

Replication of this vocational assessment process initially would be costly if all work samples used by the Work Evaluation Center were purchased. Equipment for the Work Evaluation Center from 1976 to 1981 cost $62,605.

Current operating expenses are as follows:

- per student cost: $415
- salaries (including retirement, social security and group insurance deductions): $62,106
- supplies: $4,263
- equipment: $3,100
- staff training and travel: $2,400
- other: $11,607

Total: $83,891

The backgrounds of staff members are in such areas as welfare, social work, counseling, and psychometrics.

Lessons: The State of Florida Division of Vocational Education has funded this Center and others in order to serve entire communities. In the case of the Highlands Work Evaluation Center, the residents of three counties and many agencies are served free of charge. As a result, interagency linkages have been welded and a spirit of community sharing has evolved.
The Center staff believes that this community needs more farming-related vocational assessment samples, since farming is one of the dominant occupations in these counties.

There is a concern that there may be some bias operating in the assessment process because the name of some of the work samples might differentially influence male and female interest. Furthermore, bias could occur in the interpretation of the assessment data unless it is realized that because of a variety of factors minorities and males may have some advantages in successfully completing the mechanical skills work samples over upper-middle class students or females.

If this assessment process were to be replicated, the equipment that the staff believes should be purchased initially are the following: VALPAR, Singer, JEVS, Micro-TOWER, and various interest assessment instruments.

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Practice Verified by: Site visit on December 10, 1981
Gail Zittel, RRC Interviewer
Regional Resource Center West
Effective Practice

Site: Leito Comprehensive High School
 Tampa, Florida

Contacts: Jack Hendricks, Director IMTS
 Suzie McLennon

Sphere: Child Identification and Educational Evaluation

Critical Issue: Assessment Instruments and Procedures: Occupational Exploration

Program Description: The Work Evaluation Center at Leito High School offers a five-day work evaluation similar to those offered at the 225 Evaluation Centers in Florida at high schools, community colleges, or rehabilitation centers. The initiation of these was encouraged by the State Division of Vocational Education. The Work Evaluation Centers usually have the Individualized Manpower Training System (IMTS), which is an individualized remedial training for disadvantaged students.

Leto High School is a comprehensive urban high school that serves 3,000 students. Ten high schools and four junior high schools use the Work Evaluation Center at Leito.

Background of Problem: The Work Evaluation Center and the Individualized Manpower Training System (IMTS) have been in operation at Leto High School for two years. These are programs in vocational education for disadvantaged students. The inclusion of handicapped students in these programs was influenced by a former staff member at Leto High School.

Description of Practice: The IMTS program was designed to support vocational education job preparatory programs. The program provides for an assessment of learning difficulties and individualized prescriptive instruction and guidance for students who need special assistance in order to succeed in vocational education. The basic program encompasses a combination of instructional components consisting of reading, language, arithmetic, complementary skills, and employability skills. A needs assessment is performed for each student by personnel trained in IMTS concepts and program procedures to identify needs in each of the instructional components. The assessment instruments consist of a locater test and levels E, F, and G of the Test of Adult Basic Education (TABE), Form 1 and Form 2, 1967 Edition - Californ: Testing Bureau, McGraw Hill Publishing Company. Prescriptions are prepared for each student on the basis of the assessment. The program is characterized by open entry/exit, non time-based instructional modules, flexible schedules, performance based evaluation, and a non-graded system.

The IMTS program may provide an occupational exploratory component (work sampling). The occupational exploration component was designed to provide direct hands-on experiences with tools and materials and work simulations common to a broad cluster of occupational areas. The program component is designed to assist persons with special needs to identify vocational
interests and skills, and to aid them in making and adjusting to occupa-
tional choices for training. The instruments used include the VALPAR,
Singer, and Project DiscoverY, and some homemade samples.

The IMTS at Leto High School serves eight students at a time, or an average
of 100 students annually. Students in grades ten through twelve who are in
vocational education programs may be referred to the IMTS. Referrals for
this program may be self-initiated or made by teachers or counselors.
Criterion for placement in IMTS is two grades below present grade level in
math, language, and reading. The IMTS is used as a remedial predictor of
success in a vocational program.

A unique feature of this Center is the use of a Radio Shack TRS 90 computer
by work evaluators to prescribe individualized training needed in basic
skills, vocational direction, additional testing, medical or psychological
evaluations, employability skills improvement, or referrals to other
agencies.

The present staff includes one work evaluator and one aide who have taken an
inservice vocational assessment training offered by Dr. Allen Kerns of the
University of South Florida, Vocational Education/Rehabilitation Special
Needs Program.

Implementation/Maintenance: The State Division of Vocational Education
encouraged the initiation of the IMTS as a support system for vocational
education programs in schools.

Outcomes: Only a few handicapped students have been evaluated by the
Work Evaluation Center to date. The staff is adding to the work samples
currently in use. Identified handicapped students from feeder schools will
be bussed to Leto High School. An estimated six handicapped students will
be evaluated weekly beginning in January 1982.

Resources Required: There are no current estimates available for the costs
of providing this evaluation process for handicapped students. This is
partly because it is still in its infancy. Furthermore, there is little
program distinction between assessment and training. Any student may
repeat the assessment to learn more about his or her educational strengths
or weaknesses.

A grant from PL 94-482 Subpart 2 funds initiated IMTS. It operates now on
state and local funding.

Learnings: The Leto High School Work Evaluation Center staff members hope
to improve the assessment process for hearing impaired students by using a
total communication approach. To do this, they plan to learn sign language.
They also are considering hiring an interpreter to use with hearing
impaired students during the assessment process. Other activities planned
include surveying handicapped students to better understand their needs,
searching for additional funds, and looking for ways to share costs with
special education programs.

The staff believes that a successful individualized vocational training
program is intimately linked to the work evaluation process.
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Practice Verified By: Site visit on December 9, 1981
Gail Zittel, RRC Interviewer
Regional Resource Center West
Effective Practice

Site: Office of Santa Clara County Superintendent of Schools
San Jose, California

Contact: Bill Johnson, Coordinator for Vocational Education

Sphere: Child Identification and Educational Evaluation

Critical Issue: Examiner Expertise: Training teachers and administrators to conduct assessments

Program Description: The Santa Clara County Office of Education's career/vocational education program was designed by Bill Johnson, Coordinator for Vocational Education, to serve the needs of severely handicapped students enrolled in county-operated special day classes. Approximately 200 students a year are served by the program. Of the 1,700 students enrolled in Santa Clara County special day classes, 834 are between 12 and 21 years of age. Originally, in 1977, the program was limited to pupils enrolled in the county's severe delayed language/aphasic program, and funded through local tax revenues and ADA. Now the program serves all students enrolled in a county-operated special day class who can profit from a course of work experience education.

Background of Problem: Until 1977, students served by the Santa Clara County Office of Education's special day class programs were not 1) finding employment after graduation; 2) enrolled in work experience education programs; or 3) participants in any Comprehensive Employment and Training Act program within Santa Clara County. Because of the insistence of students, parents, teachers, and administrators, a career and vocational education service delivery system was developed. This delivery system necessitated the writing of a work experience education plan and a career/vocational education handbook. In 1978, this state-approved plan was implemented by the Santa Clara County Superintendent of Schools. The plan is still operating today, as written, and has not been modified significantly since 1978.

Description of Practice: This practice is an assessment which is an integral part of an ongoing counseling and guidance process. Vocational assessment is available to students enrolled in Santa Clara County special day classes beginning at age 12. Students may request to take one or more of the assessments during the school year. The assessment process continues until the student has identified a meaningful occupational goal. All assessment instruments (hardware and software) are controlled and managed through the county's central office, and rotated on a regular basis among the county's special day class programs. Vocational assessment instruments used by Santa Clara County are norm based on the average working population and not on any given mental or physical disability. When an assessment instrument is selected for use, it is selected on the basis of the guidance needs of the individual student.

Assessment is woven throughout a five-step plan for the delivery of career and vocational education. The first step, described as Assessment of Awareness, includes the administration and interpretation of selected standardized
diagnostic and/or county developed evaluation instruments usually administered by the school psychologist or teacher, to assess vocational aptitudes and interests. These instruments include the HESTER Evaluation System, Phoenix Ability Survey System, General Aptitude Test Battery, Developmental Aptitude Test, Box Score Form A and B, and the Student Vocational Data Sheet. The Santa Clara County Office of Education considers the first step one an informal data gathering awareness phase in the counseling and guidance process.

The second step, Career Education, includes the phases of awareness and exploration. At this point, those who performed the initial assessment meet to review and discuss the data with the student, the parents, teachers, and others, such as a vocational rehabilitation counselor. Through this counseling and guidance discussion, the student learns about his/her present abilities, aptitudes, and interests as they relate to the world of work. The exploration of the world of work is provided through the county operated Exploratory Work Experience Education Program.

The Exploratory Work Experience Education Program operated by the Santa Clara County Superintendent of Schools is a combination of related instruction (special day class) and structured nonpaid occupational experiences (worksite) designed to assist the student in his/her career development. Each occupation explored by a student is selected on the basis of his/her assessed occupational traits and interests. In order to facilitate the exactness of this exploratory experience, all occupations considered must be identified in the "Occupational Outlook" section of the Annual Planning Information publication prepared by the Coastal Area Labor Market Information Group of the California Employment Development Department in cooperation with the U.S. Department of Labor, Employment and Training Administration.

The third step, Special Class Vocational Programs/Services is commonly referred to as the exploration and orientation phase. This phase consists of exploratory vocational programs and services which are designed to:

- provide the student with an orientation to vocational education
- assist the student to focus his/her occupational goals on certain aspects of the world of work
- guide the student to select a meaningful occupational goal

During this phase of the process, the student closely examines those clusters of occupations in which he or she is interested, and begins to develop elementary job entry skills through participation in one or more of the following nine subprograms of instruction:

- Agricultural Education
- Distributive Education
- Health Occupations
- Home Economics
- Industrial Arts Education
- Office Occupations
- Technical Education
- Trade and Industrial Occupations
- Work Experience Education
The occupations available are matched with the employment market in Santa Clara County as described by the Employment Development Department.

The two remaining steps in Santa Clara's five step plan for delivery of Career and Vocational Education are: Step 4, Mainstreaming Vocational Programs and Services and Step 5, Follow-Up Activities.

The staff at Santa Clara County are not aware of any discriminatory aspects inherent in any of their assessment instruments. The county trains and certifies the teachers, psychologists, and aides who administer each assessment instrument.

Implementation/Maintenance: Factors which have contributed to the implementation of this assessment process include strong student, parent, teacher, and administrative support. Administrative support for this process has existed for five years, which reflects a strong county commitment to vocational education. Various funding sources have assisted in the development and implementation of this process, including P.L. 94-142, Discretionary Funds for Vocational Education. However, funding has largely been accrued from ADA and local tax revenues.

The only change in this process has been more active participation by pupils, parents, teachers, and administrators in the design of the career/vocational education component of the individualized education program.

Teachers are able to complete and interpret assessments as well as develop career/vocational goals. Assessment is not considered an external activity, but is an integral part of the education process.

Outcomes: Since 1978 Santa Clara County has shown a steady growth in competitive employment for its graduates. In 1979 through 1980, 59 students found competitive employment. In 1980-81, 182 students were enrolled in some form of work experience education (152 students were in paid work experience programs and 20 were in non-paid work experience programs). All students receive career or vocational guidance and counseling. Secondary students who are served by Santa Clara County are provided with a maximum opportunity to find employment or further training after graduation.

A major advantage of this process is that the student is assessed, and receives instruction in occupations which are found within Santa Clara County. Another advantage is that other agencies such as the Department of Rehabilitation, Employment Development Department, CETA-Prime Sponsors, San Jose Chamber of Commerce, HOPE Rehabilitation Services, and Goodwill Industries use this assessment process in conjunction with the Santa Clara County Office of Education.

An unexpected spinoff of this process is that employers in Santa Clara County want to use the assessment data in their ongoing internal personnel hiring practices. Employers are very supportive of the Santa Clara County special day classes. They feel that if other agencies were to use the data there would be a continual flow of information from the school to the employer. Also, students would experience a smoother transition from school to the world of work. The uniqueness of this process is that it decreases self-fulfilling prophecies. Students are encouraged to reach their potential. They are not programmed into jobs based on someone else's expectations.
Resources Required: Bill Johnson estimates the resources needed to replicate this process are as follows:

1. Supplies - $10,000 - $12,000
2. Salaries - $30,000 - $35,000
3. Staff Training - $2,000 - $3,000
4. Transportation - $1,000 - $2,000
   (Transportation could be paid by the district based on current transportation allocations.)

In order to set up a process similar to the one in Santa Clara County, initial capital outlay expenditures might involve an investment of $12,000. One staff member would have to be hired to implement the program. However, after the first year this process could be self-operating and the staff member would not need to be assigned to this area full time. A unique part of this process is that teachers implement the assessment process, thus making it self-sustaining.

Learnings: One improvement in the process would be the establishment of a central location for the county's assessment instruments. This would provide a site for students to go to on a self-referral basis for assessment. The most important part of this process is that it requires the participation of administrators, teachers, parents, and students. Because the assessment is an interdependent process, it has become a part of the total education delivery system.

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Practice Verified by: Site visit on January 5, 1982
Gail Zittel, RRC Interviewer
Site: Rancho Los Amigos Hospital, Rehabilitation Training and Evaluation Program, Downey, California

Contacts: Gene Bruno, Program Director
A.G. Garris, Assistive Device Consultant

Sphere: Child Identification and Educational Evaluation

Critical Issue: Goal of Career/Vocational Assessment: Assessment as a self-learning process
Assessment Instruments and Procedures: Techniques to assess client's temperament style

Program Description: Located at Rancho Los Amigos Hospital in Downey, California, the Rehabilitation Training and Evaluation Program is one of a variety of related programs which serve severely handicapped or traumatically injured disabled persons at the hospital. The Training and Evaluation Program was instituted in 1975 to provide support to the State Department of Rehabilitation's staff serving clients with severe handicaps.

The program provides the following services:

- Total mobility evaluation (including both driver evaluation and wheelchair evaluation and mobility aids)
- Work site evaluation
- Assistive devices consultation
- Adaptive behavior assistance
- Training of department staff and outside training
- General consultation regarding services to clients with severe disabilities

The staff consists of a Project Director, a Rehabilitation Engineer, an Occupational Therapist, a Physical Therapist, an Assistive Device Consultant, a Training/Evaluation Coordinator, Counselor or Psychologist, Speech and Language Specialist, and a Secretary. The specialized background of the staff is unique and diverse.

The program trains approximately 200 rehabilitation counselors and 200 community members to assess clients' needs annually. Approximately 40 hard-to-diagnose clients participate in on-site evaluations each month.

Background of Problem: The Rehabilitation Act of 1973 (P.L. 93-112) required the Department of Rehabilitation to serve the severely handicapped population. This population requires comprehensive evaluations for independent living, mobility assistance, driving, engineering aids and devices, and vocational direction. The Training and Evaluation Program was instituted at Rancho Los Amigos Hospital in 1975 to meet this need.
Description of Practice: The practice is a systematic, inductive vocational assessment process that incorporates client input and temperament characteristics. The purpose of the evaluation is the determination of a vocational goal.

The evaluation includes a functional analysis of the client's capabilities, which requires such information as a medical history, family and social background, work history, aptitude or intellectual functioning, geographical considerations, and present functional limitations. Many observations are derived from simple, in-office tasks devised by the staff. Referral of clients to specific specialists is made when additional information is necessary. One or more task analyses may be performed to obtain specific information regarding such skills as gait stability, touch recognition, or communication skills.

The assessment extends beyond an evaluation of job performance into an evaluation of all aspects of daily living. For instance, aspects such as mobility, driving assistive devices, and family attitudes toward work are all considered. Additionally, geographic limitations are considered.

Emphasis is placed on assessment of the client's temperament style. Information is gained from discussions with the client and from the client's previous behaviors. Values clarification or vocational interest measures may be administered. A major concern of the evaluation team is matching the client's temperament with the job. Client input is sought throughout the assessment process and the client is viewed as the primary decision-maker. Upon leaving the Rehabilitation Training and Evaluation Center, the client and the Vocational Rehabilitation Counselor receive a recommendation for future employment goals and a plan for the next steps to obtain assistive devices, equipment, or modifications that may be necessary for job success.

Implementation/Maintenance: Initially, emphasis was placed on the job and modifications required for employment. Today, the philosophy and practice has shifted to an emphasis on client temperament and analysis of the occupational environment. The physical limitations of the client are considered secondary to the temperament requirements. Staff indicate that more study is needed on ways to bridge the temperament of the person to specific occupations.

The quality of the assessment process is, in many ways, the result of the quality and dedication of the staff involved. Knowledge of the many related facets (e.g., engineering, medicine, employment needs) is necessary to direct the inquiry. Most importantly, staff must be creative in their recommendations. Difficulties in retaining and hiring capable staff exist as a result of low state salaries.

Outcomes: The advantages of the practice are:

- Emphasis on temperament as the major factor in matching a job with a person has increased client involvement in the process.
- The relatively simple, inductive approach to evaluation has resulted in increased self-confidence among the counselors and professionals trained at the program.
- A high percentage of clients evaluated have become employed.
- The process is cost-effective as information needs are analyzed and only relevant information is sought.

Resources Required:

Staff:
- Training/Evaluation Coordinator
- Occupational Therapist
- Physical Therapist
- Rehabilitation Engineer
- Speech and Language Specialist
- Counselor or Psychologist
- Mobility Specialist
- Assistive Device Consultant

Equipment (Examples):
- Springs - pressure devices
- Fisherman's scale
- Classroom materials

Materials:
- Tests as needed (not heavily relied upon).

Funds:
- Estimated funds for a school to replicate this process are as follows:
  - one full-time position: $26,000/yr
  - contracted services: $15,000/yr
  - equipment and supplies: $3,000

Learnings: Vocational assessment is a combination of art and science. The most important aspect of the process is matching the information gained from the assessment process with careers and jobs that are suitable for the individual client. This process is facilitated by the basic philosophy of the program which is that the client knows more about his needs than anyone else. The role of the staff is to assist the client, using knowledge and creativity. The client must be asked the right questions to elicit his/her own solutions.

For Further Information Contact:

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Practice Verified by:
Site visit on November 24, 1981
Gail Zittel, RRC Interviewer
Program Description: The Ruggenberg Career Center is a vocational education center for special education students. Started in 1972, the Center serves approximately 400 students per year. The students, primarily juniors and seniors, are drawn from various school districts. Instruction is provided by resident instructors and home-school instructors who travel to the Center. Instructional aides also serve as bus drivers.

Two separate half-day programs are operated at the Center. The morning program serves primarily EMR students, while the afternoon program serves primarily EM and LDG students. The core program involves instruction in a variety of job skills related to twelve occupational clusters (e.g., auto detailing, child care, dishwashing and food services, motel services, nurse's aide, and office skills). Instruction in the personal and social skills necessary for successful employment is incorporated into the program.

Each EMR student participates in the instructional program until the student masters a task and has developed the necessary social skills. Then the student performs the task in a community business. The student's performance is observed and, if adequate, is certified by the employer.
Background of Problem: Before the development of the Center, vocational education programs were located at the home schools. It was determined that only marginal gains were being made by the students involved, and that very few students developed saleable skills. A survey, taken over a five year period, indicated that 90% of the program graduates were unemployed.

The committee working to establish the Center emphasized the need for a program that assisted students in developing job skills and in becoming employable. Emphasis was placed on the types of jobs available in the community. Curriculum and assessment emphasis was placed on job performance.

Description of Practice: The Career Training Center utilizes a systematic assessment process which emphasizes student interest. Prior to placement at the Center, students are evaluated in their home school. A Student Progress Evaluation is completed by the instructor to identify observable performance in fourteen areas. The instructor and career counselor jointly complete a Student Need Referral to diagnose strengths and weaknesses. Students also complete interest surveys to determine the proper area of vocational endeavor. These measures are used in conjunction with psycho-educational test data to determine classroom placement at the Center.

Classroom performance is evaluated on a criterion-referenced basis. Students are rated by the instructors on task performance. Students move to progressively more difficult tasks as they accomplish prerequisite tasks. Students may be recycled through tasks that are difficult for them. Students are periodically evaluated on attitude and behavior characteristics (e.g., attendance, grooming, following directions).

EM and LDG students participate in field trips to various work sights to observe job requirements in work clusters of individual interest. This unique practice exposes students to a wide range of vocational options. Students then select on-the-job training experiences based on this first-hand knowledge of their interests. The career counselor and instructors work with students to help them integrate knowledge of their individual skills with their interests. Students then receive on-the-job training in the selected occupation. Students may participate in more than one training.

Implementation/Maintenance: The development of a job-related assessment procedure required that available jobs in the community were identified, and that the program train and place students in these jobs. Initial information about jobs available was obtained through a survey of community businesses. Positive relations with local business is essential to the job-training process. Exposure to the program was provided through tours of the Center and local newspaper coverage. On-going contacts with employers help to maintain support for the program. Students receiving on-the-job training are observed twice a week by Center staff.

Curriculum relevance was another important aspect of program development. Staff chosen for the Center were responsible for curriculum development. Each staff spent a summer doing the job in which they were to instruct students. Thus, curriculum and materials were the result of hands-on experience. Inservice training was provided to assist staff in analyzing tasks into component tasks and in developing criterion-referenced assessments.
The availability of transportation is another feature essential to the hands-on nature of the program. The Center owns and operates a fleet of 22 station wagons and 3 mini-buses. This network allows students to visit a variety of job sites. The transportation is also cost-effective as aides double as bus drivers.

**Outcomes:** The advantages of the practice are that:

- students are involved in the assessment placement process
- students have an opportunity to try out jobs based on their interest
- students receive on-the-job training in the community

Evidence of the program's effectiveness is provided by three surveys and follow-up studies. The results indicate that 50% of the students are placed in jobs they retain.

**Resources Required:**

**Staff:**
- Career Counselor
- Field Representative
- Teachers (1 to 6 students)
- Classroom Aides

**Equipment:**
- Easily accessed transportation; replicas of motel rooms, hospital rooms, auto mechanic shops, etc.; janitorial supplies, mechanical tools and equipment; physical plant large enough to house students and the programs offered.

**Materials:**
- Tests to supplement practical experiences.

**Training:**
- Special education background with hands-on vocational education experience. Credentials in either Special Education or Rehabilitation.

**Funds:**
- Several sources of funds were tapped in the initial development of the Center:
  - Department of Vocational Rehabilitation
  - Vocational Education
  - Regular Special Education Funds
  - Regular Funds
  - EHA VI-B Funds

**Learnings:** Students must be considered the first priority. Students should be allowed to work at their own pace and not be placed into the job market until they are ready. Staff must be willing to do everything needed to support a student.
For Further Information Contact:

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Practice Verified by: Site visit on March 18-19, 1981
Janice Frost, RRE Interviewer
Lyn Starr, RRC Interviewer
Regional Resource Center West
Effective Practice

Site: Vocational Assessment Center, San Diego, California

Contacts: Paul Loringer, Special Education Coordinator - Vocational Education
Mary Jo Hunter, Vocational Rehabilitation Counselor

Sphere: Child Identification and Educational Evaluation

Critical Issue: Assessment Instruments and Procedures: Interest inventory slide presentation, criterion-referenced basic skills inventory

Examiner Expertise: Graduate student interns to conduct assessments

Coordinator of Services: Cooperative agreement

Program Description: The Vocational Assessment Center serves all ninth grade special day class students enrolled in the Career Development Center. Both centers are part of the Career Development Services of San Diego City Schools and are located at Horace Mann Junior High School.

The Vocational Assessment Center staff consists of:

- a vocational rehabilitation counselor responsible for vocational assessment
- four interns from the Vocational Rehabilitation Counseling Department at San Diego State University

The intent of the Center is to assess the interests, skills, attitudes, and capabilities of the student in order to determine vocational goals and to recommend instructional strategies.

District-wide staff assigned to assist students to reach their career/vocational goals includes:

- a vocational rehabilitation counselor responsible for job development and placement
- six vocational rehabilitation counselors assigned to the high schools

Background of Problem: A majority of the secondary students placed in special day classes were not included in the high school career and vocational education programs. The behavior of the students and their limited awareness of the world of work prevented them from participating in vocational classes.

In 1973, a vocational rehabilitation counselor, familiar with these problems, submitted a proposal for P.L. 94-142 discretionary funds in order to develop and improve career/vocational services for students with exceptional needs. The funds from the grant were used to buy assessment equipment, work samples, and to pay for the salaries of vocational rehabilitation counselors.

Description of Practice: The practice is an assessment process completed by a vocational rehabilitation counselor in order to provide instructionally relevant pre-vocational and vocational information which is implemented by special education teachers.
All students enrolled in the Career Development Center are assessed by the staff of the Vocational Assessment Center. Four interns and the vocational rehabilitation counselors assess twelve students every other week from September through May. During the week-long evaluation, the student spends three hours a day completing assessment activities.

Prior to performing the career/vocational assessment, the vocational rehabilitation counselor gathers and integrates the information included in the student's cumulative folder. Particular attention is given to the nurse's assessment of the student's physical abilities, and the teacher's assessment of the student's academic performance and social skills.

One week prior to the assessment, additional information is obtained through an interview with the student. Students are asked about their work experiences, interests and leisure time activities. During this period, parents are asked to complete the Parent Competency Checklist. This is a list of independent living skills. The parent completes the checklist by marking the extent to which the student has mastered these skills.

On Monday of the following week, the student completes the Wide-Range Interest-Opinion Test (WRIOT) and the Becker Reading Free Inventory. The staff does not like these interest inventories because they do not depict the types of occupations which are in the community. For this reason they are developing the Slide Presentation of Careers (S P O C ). The S P O C will be completed by April of this year. Once the interest inventories are completed, the student is assessed in basic social and pre-vocational skills. The Basic Readiness Skills Inventory, which is an adaptation of the Brigance Inventory of Basic Skills, is used as well as the Social and Prevocational Information Battery (S P I B ). The S P I B is read to the student. The student is required to answer true or false.

To determine the student's temperament as it relates to a job setting, the 16 Personality Factor Questionnaire is administered.

During the week, the students are also given an opportunity to complete a number of work samples. The Talent Assessment Program is administered individually. The student completes the tasks at his/her own pace. Motor, spatial, numerical, and verbal skills are assessed with various Micro-Tower work samples. Eye, hand, and foot coordination are assessed with the Valpar work samples.

Throughout the assessment process, behavioral observations of the student are systematically recorded. Punctuality, attendance, the ability to follow instructions, and social interactions are especially noted.

At the conclusion of the week the vocational rehabilitation counselor and the interns discuss their observations and the results of the assessment. Interpretation of the informal and formal assessment data is summarized in a written report by the counselor. The report includes:

- a summary of the assessments performed and the results of each
- a narrative describing behavioral observations
pre-vocational recommendations to develop needed skills for a career/vocational area of interest

- vocational recommendations which are based on the summary of interest areas and skills

- options for high school vocational training, e.g., Regional Occupational Program classes, academic or vocational classes, work experience, and exploratory experiences in the community

A pre-vocational/vocational meeting is then scheduled with the student, parents, and teachers. At the meeting an outline of a vocational implementation plan is developed.

Pre-vocational training, if needed, is provided by the staff of fifteen special education teachers working at the Career Development Center. Students receive instruction in daily living and survival skills. The assessment process at the Center is completed after the student has received this instruction. Depending upon individual differences the student may remain at the Center from one to five months.

When vocational recommendations are made, the vocational rehabilitation counselors located at the various high schools assist with the implementation of the recommendations. If the vocational recommendation is placement at a work evaluation site, the student is videotaped to assess his/her performance. The student views the videotape and receives instruction in needed behavioral changes, job seeking, and job keeping skills from the vocational rehabilitation counselor.

Implementation/Maintenance: The Vocational Assessment Center, designed to serve special education high school students, began in 1978. In 1979, in order to expand services to include pre-vocational instruction for ninth grade special day class students, the Career Development Center was established. The staff of both centers coordinate their efforts to ensure that instructionally relevant data is provided and implemented.

Initially, the dual responsibility for assessment and assistance with instruction was assigned to four vocational rehabilitation counselors. As the need for assistance with instruction increased, four additional counselors were hired. During this period, the decision was made to assign the responsibility for assessment to one of the counselors and to place the remaining counselors in the high schools. Interns from the vocational rehabilitation counseling department of San Diego State University were assigned to assist with the assessment of approximately 175 students a year. One intern was also placed with each of the counselors working in the high schools.

In the fall of 1982, all ninth grade students will be assessed and provided pre-vocational and vocational services in their local high school. As a result of budget cuts, the Career Development Center and the Vocational Assessment Center will be closed. Tentative plans have been made to purchase a mobile van which would house worksamples and other assessment materials.
The van would travel to each of the high schools with special education students. A two-phase assessment process would be completed during a two-week period. During the first week, an intern would work in the classroom with the teacher. He/she would help the teacher perform some of the assessments, such as the SPIC or the Basic Readiness Skills Inventory. After the paper and pencil assessment tasks are given, the student would complete selected worksamples located in the van.

Outcomes: The advantages of the practice are that:

- personnel from vocational rehabilitation and special education coordinate assessment and instructional services
- students are provided with an opportunity to build skills and explore vocational options
- interpretations of the results of the vocational assessments are provided to instructional staff
- students are better prepared to enter Regional Occupational Program classes or vocational education classes

Resources Required:

- Staff: Vocational Rehabilitation Counselor, Vocational Rehabilitation Counseling interns
- Equipment: Worksamples, Micro-Tower, Talent Assessment Program, Valpar
- Materials: Price Competency Checklist, 16 Personality Factor Questionnaire, Becker Free Reading Inventory, Wide Range Interest/Opinion Test, Basic Readiness Skills Inventory, Social and Pre-Vocational Information Battery, Slide Presentation of Careers (available in the fall of 1982)
- Training: Vocational Rehabilitation-Counseling Certificate, Pupil Personnel Services Credential
- Funds: Initially P.L. 94-142 discretionary funds were used to purchase equipment and materials to pay for the salaries of the vocational rehabilitation counselors. Currently, the salaries of the vocational rehabilitation counselors are paid with district funds.

Learnings: Improving the assessment process might include:

- increasing the participation of classroom teachers by having the teacher perform some of the assessments
• focusing on the identified strengths and interests of the student

• individualizing the assessment process by selecting worksamples which are closely linked to the interest and strengths of the student

• increasing the use of observational data provided by the classroom teacher

For Further Information Contact:

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Practice Verified by: Site Visit on February 10, 1982
Lyn Starr, RRC Interviewer
APPENDIX A

P.L. '94-142 legislation states:

- materials and procedures utilized for purposes of evaluation and placement of handicapped children shall be selected and administered so as not to be racially or culturally discriminatory;
- materials or procedures shall be provided and administered in the child's native language or mode of communication, unless it clearly is not feasible; and
- no single procedure shall be the sole criterion for determining an appropriate educational program for a child. (Sec. 615)

The rules and regulations, in clarifying and providing guidelines for implementing P.L. 94-142, set forth additional conditions for assessing children who may be handicapped. These include, among others:

- tests and other evaluation materials have been validated for the specific purpose for which they are used;
- such materials are administered by trained personnel;
- such materials are tailored to assess specific areas of educational need, rather than provide a single general intelligence quotient;
- tests are to provide a measurement of aptitude or achievement level, rather than reflecting the impairment (except where the impairment is what is being measured);
- evaluation is made by a multidisciplinary team; and
- the child is assessed in all areas related to the suspected disability. (121a 532)