The publication contains reports of six career education programs for handicapped adolescents and young adults. Described is the Career Development Center, an alternative high school program in Syosset, New York, which offers academic and vocational learning opportunities to students (15 to 21 year old) who have difficulty adjusting to public schools. Examined is a mobile van program in which the employment potentials of tenth grade special education students in Baltimore, Maryland, are assessed by means of psychometric tests, work samples, and observation of work behavior. Also noted is Project SERVE in St. Paul, Minnesota, in which approximately 437 educable mentally handicapped students (grades 10-12) spend half of each day either at the school or in community-based job training programs. Project Worker of Fullerton, California, is characterized as a program in which teenaged job seekers learn to locate jobs and interview, develop job skills, and train in settings both on and off campus. The Technical Vocational Program for Deaf Students is reported to include a 12-week preparatory program designed to help postsecondary deaf students in social, vocational, and academic adjustment as well as courses in industrial, technical, business, distributive, health, and service areas. The Vocational Village of Portland, Oregon, is said to offer personalized career education to young persons (14 to 21 years old) who have dropped out of high school, been referred by penal institutions and the courts, or transferred from regular high schools due to physical, mental, or emotional problems. (GW)
Career Education:
Exemplary Programs for the Handicapped

An edited version of an Abt Associates report.
Edited by Thomas P. Lake
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The above list includes the names of those people who worked on the original Abt Associates document contracted by the US Department of Health, Education, and Welfare. Their names follow the particular career education program for which they were responsible.
Foreword
One of five major objectives of the Bureau of Education for the Handicapped in the US Office of Education is to assure that by the year, 1977, every handicapped child who leaves school has had career educational training that is relevant to the job market, meaningful to his career aspirations, and realistic to his fullest potential. As an advocate for handicapped children and youth, the Bureau provides consultation and assists in the administration of Federal financial aid programs to help stimulate the initiation, expansion and improvement of career education programs for the handicapped throughout the nation.

Career education is important for every young person if he is to become a fully contributing member of our society. For the handicapped such education is of critical importance if they are to be prepared for meaningful, productive employment and meaningful and productive lives. Appropriate career education programs are not being provided a large number of handicapped persons. Each year more than 500,000 handicapped youth leave our schools, but it was estimated in 1969 that only 150,000 of these young persons entering the job market of our society had participated in any type of secondary school age career education program. In 1974, thanks to a concerted local, State, and Federal effort, this number who leave school each year without the benefit of career education. The prospects for that group of handicapped who enter the job market without preparation are grim, both for them as individuals and for society as a whole. Experience tells us that 40 percent will be severely underemployed and subsist at the poverty level, 10 percent will be partially dependent, and 30 percent totally dependent upon society for their existence, sometimes requiring institutional care.

During the 5 year period between 1969 and 1974, some of the age old barriers to the career education and meaningful employment of handicapped persons have begun to topple. As more and more handicapped youth enter into regular career education programs adapted to meet their needs or programs designed especially for them, special education and career education teachers have reached new understandings of their career potential and educational and training needs. More and more educators are participating each year in continuing education courses to better prepare themselves in this rapidly expanding phase of education. The once seemingly impenetrable barrier, lack of qualified personnel to staff programs for career education of handicapped youth, may be at least partially pushed aside in the relatively near future.

Among other barriers to the full achievement of the Bureau’s objective to provide all handicapped school leavers with appropriate career education is the lack of dissemination of information about existing programs for these youth. This publication along with others beginning in larger and larger numbers will help remove that barrier and makes it a pleasure for the Bureau to participate with the CEC Information Center on Exceptional Children in its development. The program reports were prepared originally by Abt Associates, Inc., for the Bureau of Education for the Handicapped under Contract OEC-0-72-5182 to “Assess, Document, and Spread Exemplary Programs for the Education of the Handicapped.” From a sample of programs identified by State special and career education coordinators Abt Associates selected six in this area for in-depth program descriptions for national dissemination. A similar process
was followed for programs in the areas of early childhood education and manpower for programs in the areas of early childhood education and manpower development which will be reported in other volumes.

Edwin W. Martin, Jr.
Associate Commissioner of Education, BEH
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SYOSSET, NEW YORK
The Career Development Center

In an open campus setting, students ages 15 to 21 who have difficulty adjusting to local public schools are being offered a transitional program of study aimed at individual needs. Under careful guidance and through personal contact students participate in occupational and academic learning activities.
OVERVIEW: THE CAREER DEVELOPMENT CENTER

A transitional program for high schoolers

Offering a response to individual needs

Participation in occupational and academic learning

Developing attitudes as well as skills

Guidance provides a therapeutic environment

CONTEXT OF THE PROGRAM

About the student population

Discipline—a serious problem

The Career Development Center (CDC) in Syosset, New York, is an alternative high school program serving between 250 and 300 students ages 15 to 21 drawn from 56 local public school districts in Nassau County. CDC is a transitional program which aims to help students who cannot adjust to, or function in, their local public school settings. Students return to their own schools when they have developed a capacity for independent living.

CDC sees Career Education not only as specific skill training but also as the development of proper work attitudes, human relations skills, orientation to the world of work, alternate career choices, and actual job acquisition. The program invigorates academic subject areas by stressing their practical aspects. The process of education at CDC is more important than the skill training product.

CDC offers a secondary education free of many of the restraints and demands of the students' home schools, a flexible, experimental program responsive to individual needs. A wide variety of alternative components are available—work-study, work cooperative, recreational excursions, art, music groups, and so on—from which the student can assemble his own program and schedule. The several campus buildings in which CDC is located are divided into seven Units, sometimes called Mini Schools. Each student is assigned to a Unit and participates in occupational and academic learning activities. Elective subjects are pursued away from the Unit. Each Unit contains a different vocational cluster, or grouping of occupational offerings. The Comprehensive Unit, for example, offers Office Practices, Distributive Education, and Health Services.

The Career Development Center regards guidance and direction for its students as crucial: students are immersed in a therapeutic environment whether they're in class, walking across the campus, in a formalized counseling session, or participating in an after-school program. All staff members are oriented to the needs of their students and see each encounter with young people as a chance to provide warm and trusting relationships. Further, staff members try to observe students in a variety of settings—with other students, with parents, with other adults—in order to better understand and help them.

When an intermediate school district, the Board of Cooperative Educational Services (BOCES) took over CDC's predecessor, the Service Occupations School, this institution was in dire need of help. The school's students, ranging from 12 to 21 years, exhibited degrees of emotional disturbance from less impaired to very seriously handicapped. It was the "last place" to which most of these students could be referred, and both students and staff saw the school and its program as hopeless. Discipline was a serious problem: students were there until age 21 unless they elected to quit at 16, and staff were either geared to teaching trades to the nonhandicapped or were special education teachers geared to working only with educable mentally retarded youngsters.
When BOCES took over the school in 1968, it initiated a dramatically new and different program, including extensive facilities and equipment renovation and entirely new student, teacher, and administrative policies. The program became geared to 15 to 18 year olds, and degree of disability was reduced for a more homogeneous group. Attempts were made to bring special education and occupational education staff together for a mutual understanding of new program goals. Through the offering of vocational clusters, students are now encouraged to explore various fields rather than concentrate immediately on one skill. New courses, both occupational and elective, are keyed to student interest. While CDC offers choice, it also works to eliminate the pressures of traditional high schools, where most CDC students were unable to cope with lack of individualization or pressures which resulted in unacceptable behavior.

With the exception of a small VEA grant, all CDC monies are provided by BOCES. These BOCES funds come from the local school districts which are, in turn, reimbursed by the State Department of Education for an average of 61 percent of tuition charges. Local districts pay $4,990 per year for each of their pupils enrolled in a BOCES program, plus a BOCES administrative fee and a facilities rental charge per pupil. Per pupil cost to BOCES for CDC operations is $5,566 per year (based on an enrollment of 280 students): the difference between actual costs and tuition charges is a matter of BOCES distribution, since all the cooperative districts' programs do not cost the same. The Career Development Center is administered by a Principal and two Assistant Principals who are responsible to BOCES' Assistant Superintendent for Special Education.

CDC program operations can best be characterized as flexible and experimental. New approaches and ideas are initiated eagerly: they may be discarded just as easily if they do not achieve the desired results. Change is frequent and, though students may occasionally find it disquieting, serves to help the program "find its level." This flexibility emerges as individual student programs are laid out: exceptions to general rules are made gladly when they provide an opportunity to better fulfill a student's potential and interests. Staff bear in mind that since their students could not function in regular school settings, CDC must offer an untraditional setting in which the student can succeed.

One of the key concepts of CDC programming is decentralization. Program operations and facilities are broken into small units. On this more human scale, a student is able to develop some sense of belonging. Decentralization also helps diffuse the tense and potentially volatile atmosphere students perceived in their local schools.

Each student is assigned to one of seven Units or Mini Schools located on the campus-like setting. The Mini School is his home base, and travel across campus for electives provides variety of location, an
unconfined feeling, and a chance for new experiences. Transfer to another Unit is encouraged when it enables a student to experiment with subjects he wants to pursue. The basic Units include: Automotive; Electronics and Building Maintenance; Horticulture; Comprehensive (Office Practices, Distributive Education, Health Services); Food Preparation; and Multioccupational Exploration or Freshman Units. Each Unit is staffed by a Lead Teacher and a number of Occupational Education and Academic (Special Education) Teachers and aides.

Each student remains at CDC for approximately 5 hours a day. The week is divided into 40 half hour periods of classes, 8 per day. Periods for the week are scheduled to accommodate 18 periods for occupational education; 12 for core academics; 10 for enrichment or electives. While most students follow this general framework of course selection, it is by no means rigid. Half hour periods were selected to minimize student restlessness and loss of interest. Staff also felt the importance of offering students the freedom to work off steam—find someone to talk to, have a soft drink, or engage in some other activity.

During the freshman year, students can explore a variety of occupations before being assigned to a Unit or vocational cluster. This occupational instruction is not intended as vocational education per se: students do not receive skills training in a chosen "career occupation" directly linked to specific job placement (although this orientation does not preclude student placement in jobs or further training in a vocational skill area). Rather, vocational education at CDC is exploratory and is used as a vehicle to achieve more basic aims. Core subjects meet local requirements. Core subjects consist of English, mathematics, social studies, science, and physical education. These subjects, particularly important in fulfilling requirements when a student plans to return to his local school, are taught by the special education teachers in a student's Unit. Each teacher is free to choose methods and materials, and encouraged to exchange ideas with other teachers. With the emphasis on individual programing, gaming and team teaching are often used.

Enrichment or elective courses are offered to build on student interests. Courses offered include art, music, drama, personal grooming, reading, driver education, and speech therapy. All of these enrichment courses are taught away from a student's Unit to give him the experience of traveling across campus and to help him begin to develop inner controls and a sense of independence. Driver education is a significant skill, necessary for independent living in Nassau County where public transportation is virtually nonexistent. Speech therapy involves about 50 students individually or in small groups for two periods a week. Art is especially successful in encouraging students to express themselves. The Reading Center is a program innovation which staff hope to eventually expand into an individualized learning center for students. At present, about 90...
students attend the Reading Lab individually or in small groups, and there are several entire classes which participate in this program because of their low functional level.

Guidance of students is the fundamental idea behind CDC. Staff members are prepared to help each student build a positive self-concept through successes, overcome the stigma of being "special" or "handicapped," find strengths and areas of interest, acquire social skills and friends, and develop hope and positive plans for the future. Every aspect of school life is geared to providing this guidance; students wander casually in and out of offices, seeking and receiving reassurance. Teachers often make themselves available to students for free periods, designed to encourage the formation of small musical groups, additional creative work, or casual conversation.

Guidance Counselors work with all of the students in discussing goals and problems. They arrange the placement of students in special programs or jobs on a part or full time basis. Both Guidance Counselors and Psychologists provide counseling on a group or individual basis. Staff Social Workers are frequently involved in arranging for services from outside agencies.

Behavioral objectives are formulated for each student by a team consisting of his Unit teachers, at least one pupil personnel staff membor, and other interested staff. At least once a year, each student is discussed in a group meeting—the Case Review. Progress is discussed, and new methods for accomplishing objectives are formulated, often using behavior modification techniques.

Each teacher is trained to become sensitive to student needs and changes, and to learn not only to diagnose conditions, but to provide solutions. The program uses three basic techniques for bringing about desired changes in student behavior. First, the environment may be modified to prevent or avoid disruptive or nonproductive behavior. Secondly, students are permitted to act out their feelings to a great extent; staff members are trained not to react to, and thus encourage, many types of negative student behaviors such as the use of profanity. A third modifier of behavior, and one which is in constant use, is positive reinforcement (praise, warmth, attention) for desirable behavior.

Because CDC does not want the effects of its program to end when students go home, a series of special programs has been designed to help extend CDC programming to the student and all involved with him in a variety of settings. These special programs also demonstrate the program's flexibility as staff attempt to respond to individual student needs with an appropriate mix of program ingredients. These programs include:

Federal VEA funds go toward the rental of "The House" and the salaries of a teacher and aide in charge of the program. Two days a week, the House is visited by a group of the most seriously impaired students for an off-campus real life experience. They are taught life skills such as ironing, making beds, and skills for independent living. One day a week the House is used by a group
of students as a home economics instruction center. And once or twice a week, it is the setting for simulated gaming exercises. For example, students from the electronics unit might be asked to role play a! television repairman on a call to the House.

Split Occupation
Two classes of CDC students (all 16 or older) spend half of each day receiving specific vocational instruction at the BOCES occupational Center. The remainder of each day is spent in classes at the CDC Unit.

Work-Study
Students participate in two work-study programs, with staff counsel and supervision. Five students participate on-campus, and are paid by the Neighborhood Youth Corps. In a Cooperative Work Study program, more than 16 students work at a community department store with pay. Their schedules are arranged so they can alternate a week of work with a week of study at CDC.

Work Cooperative Program
This involves approximately 12 students (exclusive of Neighborhood Youth Corps) in a program geared toward employment readiness. A student’s day is split between a job and classes at CDC. Participation in this program depends on job availability, with limited recruitment done by the BOCES Office of Student Placement.

On the Job Training (Employment Based Study)
This fairly unique arrangement has provided CDC students with a chance to learn job skills on the job, under direct CDC staff supervision. In a nearby building which houses all graphics
Chapter 1 - Career Development Center

operations for BOCES; BOCES and the graphics staff offer CDC students on the job training in all phases of graphic arts—lithographing, photography, and so on. A CDC teacher works full-time at graphics, teaching the academic subjects in a classroom there and supervising students. Staff hope to develop opportunities for similar on the job training in new occupations.

Periodically a group of 20 students and two staff members take a Mini Trip, spending 3 days together at a YMCA camp in the country. The outdoor surroundings lend themselves to nature and ecology studies, as well as year round recreation. By removing the students from the daily pressured and emotional settings, CDC hopes to improve their social skills and help them master some problems. This experiential approach also helps lay the groundwork for close relationships between teacher and student as well as student and student.

As a result of need voiced in a PTA meeting, FACE, or the Family Activity Continuing Education program, was recently instituted. Simply stated, FACE brings parents and students (and often teachers) together one evening a week for a group learning, social situation. Courses offered include ceramics, floral design, painting, sculpture, and so on. FACE is not adult education: its primary purpose is to provide a setting wherein families and teachers can come together for recreational activities. The focus of FACE is learning about other people and the process of learning, as well as about particular subjects and skills. People learn at FACE by sharing a common experience. Through FACE activities, parents are able to see their children in new roles: they see them approach learning experiences eagerly or confidently, possessing skills and competence, and interacting freely and warmly with others. Children, in turn, can interact with their parents in new ways. They especially appreciate being on "common ground" with their parents in FACE activities, when they, as well as their parents, are beginners in new learning situations.

□ The Career Development Center sees itself as a transitional program ideally preparing students for return to their local district, but alternatively for further training, job placement, or other placement for which they were previously unprepared. The ultimate goal of the program is to eventually prepare students for independent living in the adult community. The vocational clusters are designed to help meet these goals.

Each vocational cluster within a Mini School or Unit is composed of several different kinds of occupational training. One cluster, for example, contains auto mechanics, auto body, and carpentry. Students explore one, two, or all of these occupations in the unthreatening atmosphere of their own Units. Different ability levels are designed within each occupation, and students are placed in the Unit most closely matching their interests and abilities. The and
CLUSTERS INTENDED TO BRING ABOUT THREE CHANGES

1. ATTITUINAL.

Reversing negative feelings

When students enter CDC, they are generally confused and feel defeated by previous failures. Frequently they are hostile, fearful, and resentful of the school and its staff. They have no understanding of their strengths, goals, and interests. CDC tries to bring about the attitudinal changes necessary to reverse these feelings. Working within traditional occupational fields gives some sense of normalcy to students who have often been singled out as “special.” Through exposure to a variety of subjects and occupations, CDC helps the student begin to explore his interests. By experiencing tasks which he can master, the student begins to develop a sense of competence, and a knowledge of his specific strengths. Staff hope that through a series of positive experiences, the student will find some direction and purpose to his life. This direction may focus on a particular occupational choice; however, staff consider any positive expression of choice and direction by students to represent significant change.

2. ACQUISITION OF GENERALIZED SKILLS

A nonacademic approach

While CDC does not feel its purpose is to provide indepth job skills, it does hope to help the student acquire certain generalized skills applicable to any job or life situation, i.e., working with others, following directions, careful work habits, pride in a product, and responsibility. The choice of vocational clusters as the vehicle for the acquisition of these skills is meaningful. Students entering CDC have many negative associations with traditional academic subjects if they have failed to master them. Often a student may not be ready for intellectual pursuits, but may benefit greatly from working with his hands. The concreteness and nonacademic nature of the vocational clusters are appealing to these students.

3. ACQUISITION OF SOCIAL SKILLS

Encouraging close staff/student relationships

Students entering CDC often lack social skills such as the ability to initiate a relationship, to talk to others, or even to maintain a relationship once begun. Frequently students have problems relating to other members of their families, and sometimes they are living apart from their families. CDC staff tackle these problems by making themselves available to students in an unthreatening manner, and encouraging close staff/student relationships. Mini Schools and vocational clusters encourage intimate relationships because the Units and the number of people involved are relatively small. Even if a student moves from Auto Body, for example, to Auto Mechanics, he still has a teacher with whom he is familiar. Students, too, are well acquainted with other students in each Unit. Because many of the projects worked on in the vocational clusters call for cooperative effort, students must learn to work together, and ultimately to socialize.
Each student admitted to CDC is referred to the program because he or she has experienced adjustment problems in school. Program staff firmly reject any attempt to categorize or label their students, who have a variety of cognitive and affective deficits manifest by disruptive behavior in class, anger toward, and fear of authority as well as peers, and a rigid, unproductive response to stress. In the Fall of 1972, 280 students were enrolled; CDC considers 250 to 300 to be an optimal range.

Students range in age from 15 to 21 years, but staff feel students should ideally be from 15 to 18 years. Older students are accepted only when it is felt they can still benefit from CDC's offerings within the limited time constraints. Eighteen percent of the students are female, and three quarters of the student population is white, with one quarter black. County residents are generally of a high socioeconomic level, although 27 percent of CDC students are drawn from poverty pockets within the County.

Although students are referred to CDC because they cannot function effectively in their local schools, in order to be admitted to the program individuals must exhibit some potential for growth. Several kinds of special needs are served by other facilities: all educable mentally retarded students are served by the local school districts, while the trainable mentally retarded, cerebral palsied, physically handicapped, and severely emotionally disturbed are served by other BOCES programs. All referrals for admission to BOCES special education programs (including CDC) go through the BOCES office of referral, where staff direct the referral to the most appropriate program. Eighty percent of CDC's referrals come from primary level BOCES schools; others are from local school districts.
or other special programs. While CDC has year round open enrollment, planning for new admissions is done in the spring, with most new students arriving in the fall. No quota system is used.

Once a referral has been determined appropriate for CDC, BOCES staff arrange for the student to meet with a CDC guidance counselor and psychologist, while the parents meet with the CDC social worker. Within a week, all meet together. The psychologist receives the student's records and test results from the local school district. CDC does not generally feel further tests are necessary or advisable, but if student records show different or contradictory test results, further testing (perceptual, projective, or achievement) by the psychologist or BOCES Child Development Center staff may be carried out at the psychologist's discretion. A decision to admit is based on the information in the student's folder, interviews, and the appropriateness of the match between the student's need and CDC's services. The psychologist's report on each student is placed in the student's file and made available to staff. Most applicants are accepted; those who are not are referred to the Office of Vocational Rehabilitation or other BOCES programs.

**GRADUATION REQUIREMENTS AND PLACEMENT OPPORTUNITIES**

Working toward return to the home school district

The criteria for graduation

- Preparations for a student to leave CDC begin as soon as he enters the program. Because CDC considers itself a transitional program, and because it hopes students will be able to return to their local schools, close ties are maintained with local district personnel. Through early meetings with the local school guidance counselor and the CDC team, behavioral objectives are established for each student, the foremost objective being return to the home school district.

In order to leave CDC, a student must show a potential for independent living. All graduating students are granted a CDC certificate; in addition, they may receive a general or regents' diploma from their local high school, or a high school equivalency certificate. Criteria for graduation are:

1. Student must have reached a minimum age of 17 by June.
2. Must show evidence of satisfactory emotional adjustment.
3. Is eligible for general diploma granted by the district (not required for all), or
4. In the opinion of the staff, the student has plateaued and now is ready for either fulltime employment, another training program such as Office of Vocational Rehabilitation, or a sheltered workshop experience.

**CDC STAFF**

CDC has 69 full-time teaching and guidance staff to serve its approximately 280 students. Administrative staff consists of a principal and two assistant principals. Each assistant principal is responsible for the supervision and evaluation of three of the six units. One of the assistant principals also oversees pupil personnel staff and activities (new admissions, referrals, discharges), innovative program changes, curricula, and tests. The second assistant principal
supervises business and budgetary matters, transportation, and implementation of many of the new programs.

**The Pupil Personnel Staff**  
Pupil personnel staff consists of three guidance counselors, two psychologists, and two social workers. While some of their duties overlap, each has a distinct job profile. The guidance counselors have overall campus responsibilities and coordinate many activities involving students. They counsel students individually or in groups, and are chiefly responsible for student placement and follow up. Perhaps most importantly, they form liaisons both within and without the school, especially with the local school staff. The psychologists screen and test during admission, and at other times they participate in individual student case reviews, consult with the administration, teachers, and the local school district, and provide intensive group and individual counseling to specific students referred by the guidance counselors. The social workers' jobs often overlap the others, although these people concentrate on working with the families of students.

**Liaisons within and without the school**  
Perhaps most importantly, they form liaisons both within and without the school, especially with the local school staff. The psychologists screen and test during admission, and at other times they participate in individual student case reviews, consult with the administration, teachers, and the local school district, and provide intensive group and individual counseling to specific students referred by the guidance counselors. The social workers' jobs often overlap the others, although these people concentrate on working with the families of students.

**The Teaching Personnel**  
Teaching personnel for the six Mini Schools or Units consist of six lead teachers who function somewhat as department chairmen, two of whom teach occupational education courses; 15 additional occupational education teachers; 15 special education teachers who teach core academics, and 10 teaching aides. No distinction is made between occupational education and special education teachers, except in the content of the courses they handle. All teachers in a Unit work as a team to find the best way of reaching students.

**The Resource Personnel**  
Resource personnel not assigned to Mini Schools but involved in instruction of electives or other functions are a curriculum teacher, two registered nurses for health instruction, a reading teacher and a reading aide, four physical education teachers, an art teacher and an art aide, three music teachers, and a speech therapist and an aide.

**Filling vacant positions**  
When a job opening is to be filled, the CDC principal drafts a job description with other interested staff, and the BOCES assistant superintendent for special education signs the decision to hire. BOCES then recruits candidates through its office of personnel and sets the salary level. Responsibility for interviewing candidates and hiring rests with the principal.

**STAFF TRAINING**

- **Formal and informal training sessions**
  
  While a 2 day orientation is held each fall for incoming staff, program administrators place more emphasis on other formal and informal training opportunities throughout the year. For example, one exercise calls for staff members to design individual teaching plans and submit them to a group of teachers: the ensuing exchange provides a valuable learning experience.
  
  One useful resource is the BOCES resource center's library of curriculum and audiovisual materials. Throughout the year, BOCES operates training courses at a variety of times and locations, with each course usually running 15 sessions. Attendance at these sessions, taught by BOCES staff members or outside consultants, is voluntary, but credits toward BOCES' salary determinations are recorded.
Staff members often exchange ideas on an informal basis and bring each other up to date on activities on student progress. Several types of structured meetings are also held.

Monthly staff conferences for the entire CDC staff body focus on the presentation and discussion of a variety of administrative and instructional topics. Staff are briefed on coming events, brought up to date on operations and introduced to new ideas and projects.

Other monthly meetings bring the principal together with individual staff members to exchange information on students and program and to discuss the teacher’s performance.

Unit meetings are held by each unit for its staff two or three times a week. During these meetings, the lead teacher encourages an exchange of ideas on curricula and methods and a sharing of experiences with, or insights into, students. Approaches and objectives for students are reformulated.

Case reviews are held once a week and focus on one student at a time. In attendance are Unit staff members and one or more pupil personnel staff. These reviews provide an opportunity for in-depth discussion of student progress and reformulation of objectives where appropriate.

Some 51.5 percent of CDC parents are blue collar workers, 24.3 percent white collar, and 12.5 percent are unemployed. The balance are professional or self-employed. More than one quarter of the mothers work outside the home. Students living with both parents make up two-thirds of the enrollment.

CDC staff and parent group leaders are pleased with the success of their monthly PTA meetings which attract parents, teachers, and students. At one PTA meeting, for example, attended by more than 90 parents, teachers and students, the group participated in discussions and role play related to student attitudes and situations. Many significant feelings were revealed and dealt with. In addition, parents are involved in the FACE program described earlier. Staff feel the results of such group interactions are significant. Students are able to see the worlds of home and school come together; teachers and other staff gain valuable insights into the students’ family interactions; and parents can observe their children as they interact with teachers. At best, a new understanding of each other emerges.

At present, community contacts are primarily limited to those agencies or businesses providing services or jobs to students and their families. Both the social workers and the guidance counselors are involved with a number of community agencies. Most often the counselor works with those providing training, job placement, or other services to students. Social workers are more often involved in the provision of health or welfare services to students and their families. This can include home or office visits, and the provision of transportation to parents.

NOT TO FORGET THE PARENTS

Active parent involvement

COMMUNITY CONTACT

Providing services and jobs
The Welfare Department with its homemaker and other services is a key agency linkage. CDC also works with the Child Abuse Units and their associated residential homes. Case aides from the Probation Office assigned to CDC students meet with CDC staff once a week. Other major agency contacts include various clinics providing psychotherapy (private and public); local school districts and recreational programs; BOCES' job counselor, used to help place graduates; New York State Employment Service; Office of Vocational Rehabilitation, for evaluation of abilities and aptitudes, and placement; BOCES' Division of Occupational Education.

EVALUATION OF THE PROGRAM

- BOCES has several procedures for evaluating specific and overall aspects of CDC's program. The Staff cited several indicators of program success. First, during the 1971-72 school year, average daily attendance increased from 77 percent to 85 percent, where it still remains. This figure exceeds that of most secondary schools where, as at CDC, over half the student population may no longer be required to attend due to their age. Many CDC students had
attendance records as low as 20 percent prior to leaving their local district school.

Second, for the 1971-72 school year, the program reported a better than 80 percent record of success in terms of student placement. Program administrators claim a successful placement rate of better than 80 percent. That is, the program will have failed with fewer than 20 percent of the students that it admits. Only two kinds of placements are considered failures: (a) institutionalization, and (b) forced withdrawal or return to the local school district because of CDC failure to meet the needs of the student. The successful placement most in keeping with the program's goals is a return to the local school district, particularly if it results in a student's gainful employment, sheltered employment, client of Office of Vocational Rehabilitation, further training, and so on.

From September 1971 to June 1972, a total of 161 students were placed, of whom 21 were considered to be failures (those in residential treatment or detention facilities). Another 19 students moved out of the area. During the entire year, there were no dropouts. Therefore, 120 of 142 students were classed as successful—a total of 85 percent. Of those students returned to districts, six received a District Diploma or High School Equivalency certificate. The placement breakdowns are as follows:

- Retread (return to local school district) 24
- Full Employment 31
- Other Training (Job Corps, Neighborhood Youth Corps, Office of Vocational Rehabilitation, Occupational Education Training) 66
- Residential Treatment 12
- Detention Facilities 9
- Moved from Area 19
- TOTAL 161

Other indicators of program success and evaluation procedures include teachers reporting that many students exhibited positive behavior changes following participation in a Mini Trip. Anecdotal "before and after" teacher reports on students provide information on individual student progress in socialization and other behavior modification goals as a result of a Mini Trip. Accompanying staff members make written comments on behavior changes they have observed during the trip. Behavior changes noted in students included emergence of leadership qualities and acknowledgement of responsibility, acceptance of the teacher as a human being, the development of friendships among students and teachers.

The program staff further felt that significant improvement had been achieved in the overall atmosphere of the school and in parents' appraisal of, and reaction to, the school. Program staff felt that, because of the changes initiated when CDC became a responsibility of BOCES, certain "soft" evaluation findings do provide a measure for success. For example, the atmosphere of the school has become

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**Successful student placement record**

**Positive behavior changes**

**Improved atmosphere**
less tense, with the virtual disappearance of violent fights and destruction. In years past, complaints from parents and others were frequent; during the first semester of 1972-73, there were no complaints.

End of year Pupil Progress Reports completed by teachers reported pupil progress in meeting performance objectives. At the beginning of the year, performance objectives were formulated by staff members for each student. Through observation and staff interchanges during the year, teachers were able to assess student progress on these performance objectives and other measures. The end of year Pupil Progress Report, completed by his principal teacher, listed 18 questions in six assessment areas: (a) attendance, (b) social adjustment, (c) personal adjustment, (d) behavioral improvement, (e) academic achievement, and (f) prognosis.

Additionally, teachers are asked yearly to provide self-assessment measurement of their performance in the classroom, in the school as a whole, and in professional fields. Fifteen questions on the Mid Year Teacher Self-Assessment asked for brief summary statements regarding specific school and professional activities carried out or problems identified. Increased parent and teacher participation in PTA was also counted as an achievement.

The newly formed CDC Alumni Association promises to provide an information mechanism for following up former students, and thus for evaluating their progress. The Alumni Association was developed after program staff found graduates returning to CDC to visit and to seek out friends. This group can benefit graduates as well as current students by providing role models and hope for the future. A former student is responsible for organizing the group.

Last, yearly Pupil Progress Reports (report cards) provide data on individual pupil progress to the student, CDC, and the home school district. Two days at mid year are set aside for exams, though these marks are not intended for use in an overall program evaluation. Local school districts receive Pupil Progress Reports once a year, in compliance with their requirements. Students' grades are marked A through F, but grades are given on an individual basis, rather than against a class norm.
TOWSON, MARYLAND

The Mobile Unit for Vocational Evaluation

Tenth grade special students in 15 Baltimore County high schools have the opportunity to find out what their occupational potential is. A mobile van travels from school to school spending a one week period testing and evaluating students. Parents, teachers, and counselors share results and come to a better understanding of the student's potential in the work world.
OVERVIEW: THE MOBILE UNIT

Assessing employment potential

The Mobile Unit for Vocational Evaluation assesses the employment potential of over 150 mildly mentally limited students enrolled in special education classes throughout Baltimore County, Maryland. The 48 foot long van visits 15 comprehensive high schools, with special education programs, scattered across the 607 square mile area surrounding the city of Baltimore. The Mobile Unit primarily serves 10th grade special education students, although it also visits junior high schools and schools for the severely mentally limited and orthopedically handicapped when needed.

Helping teachers individualize instruction

The Mobile Unit demonstration project is intended to provide more specific direction for educators in individualizing pupil instruction in the classroom, facilitating pupil placement in inschool and community worktraining programs, and reducing the drop out rate of 16 year old students who may leave school for economic and other reasons. By uncovering abilities not apparent in the classroom setting, the Mobile Unit for Vocational Education attempts to provide the teacher with realistic appraisals of the work potential of students while encouraging youngsters to explore job possibilities or training which can lead to satisfactory work placement.

Uncovering latent abilities

The Mobile Unit assesses a student's abilities, aptitudes, and limitations by exposing him to a simulated work environment contained in the van. Evaluation of student employment potential is based on psychometric tests, work samples, and observation of work behavior. Psychometric tests assess eye-hand coordination, manual dexterity, mechanical ability, form perception, and areas of vocational interest. Work samples include a set of instructions for a task and enable the student to demonstrate his ability to perform certain skills. Each work sample reveals work traits or sets of skills required to perform actual jobs in the community. Student performance is rated on the basis of established norms for workers in the competitive labor market. Observation of behavior includes both an anecdotal and formal assessment by a trained vocational evaluator and his aide to determine the level to which a student can organize and complete a work sample, can get along with other students in the simulated work environment, and can follow directions.

The Unit's vocational evaluator and aide prepare a report on each student's performance during his one week attendance in the trailer by evaluating the student's ability, aptitude, and tolerance in relation to the world of work and providing a functional analysis of vocational potential.

Evaluation alerts the professional.

The evaluation report may include social, medical, and/or psychological recommendations which alert the professional community to a student's special needs. In addition, the report identifies for the student his or her areas of vocational potential, emphasizing perhaps for the first time the positive aspects of each student as a valuable individual.

Activities coordinated with ancillary programs.

Mobile Unit activities are coordinated with a series of ancillary programs in Baltimore County, such as the Community Centered Work Experience Program, in a system of comprehensive service: for evaluating, rehabilitating, training, and counseling each special education student for a productive adult life.

CONTEXT OF THE PROGRAM

The concept of a mobile vocational evaluation facility was formulated in 1967 in response to the need for early intervention
programs for the handicapped in schools scattered over Baltimore County's large geographical area. Early in 1966, representatives from the Maryland State Department of Education, the Baltimore County Board of Education, and the Board's Division of Vocational Rehabilitation established a committee chaired by the Supervisor of Special Education. This committee studied the procedures and equipment required to conduct vocational evaluation; the medical, biographical, and psychological data needed; and staff qualifications for such a project. While exploring avenues for funding, committee members visited existing facilities, explored evaluation centers across the eastern United States, and determined the types of facilities and level of financial support required to establish the mobile concept.

Following funding in 1970 under the Vocational Education Act, a plan was implemented to introduce the Mobile Unit concept to the County before operations began in October of that year. Working with administrators in the Baltimore County Board of Education, the Board's office of special education staff held a countywide meeting for all special education teachers, department heads, school principals, counselors, and other interested educators. Faculty meetings and parent and student orientations were also held at the County's 15 area high schools to promote the concept. Each year, school administrators participate in developing and organizing the travel schedule for the Mobile Unit. Working as a cooperative team with the staff of the Mobile Unit, administrators assist in planning the arrival and departure dates of the van at each school.

The Mobile Unit's operating budget for the 1972-73 year was $60,000. Vocational Rehabilitation Act funds administered through HEW's Social and Rehabilitation Service represent about 22 percent of the total: the remaining 78 percent was provided by the Baltimore County Board of Education. By 1973-74, the Mobile Unit and staff would be totally supported by county funds. Average cost per student was $250, excluding the value of inkind contributions.

One of four mobile units currently serving the handicapped across the state, the Baltimore County Mobile Unit moves on a rotating basis to 15 high schools. The van's movement through the county alternates each year (east to west and west to east) to accommodate school preferences for the van's visit later in the year when students are more likely to be adjusted to the high school and classroom setting. Since the evaluation process usually takes 5 full school days, the number of weeks the van spends at each school depends on the number of students in each special education class. The unit can accommodate from five to seven students for each week long evaluation.

The Mobile Unit contains facilities offering work samples in the two most common entry level occupational areas. A clerical and business area has typewriters, adding machines, calculators, cash registers, and other business machines. A second area houses shop equipment, including electronic, metal, and woodworking machines, an industrial sewing machine, a gas pump, and a variety of hand and power tools. The third compartment, relatively small, serves as office space for the evaluator and evaluator aide. Located in the center of the trailer, this compartment also acts as an insulator for noise.
Figure 1. FLOOR PLAN OF MOBILE UNIT FOR VOCATIONAL EVALUATION

DESCRIPTION OF INTERIOR

1. File Cabinet
2. Carrel
3. Carrel
4. Carrel
5. Desk for Evaluator Aide
6. Duplicating Machine and Supply Cabinet
7. Gasoline Pump
8. 6 Cylinder Automobile Engine
9. Drill Press & Table, Supplies
10. Work Bench - Fixed Position
11. Work Bench - Adjustable Height (Hi/Lo)
12. Radial Arm Saw
13. Industrial Sewing Machine
14. Storage - Raw Materials
15. Storage - Cleaning Materials
16. Work Surface - Electronics, Plumbing
17. Evaluator's Desk
18. Table
19. Work Surface - Filing, Cash Register
20. Work Table
21. Time Clock
22. Storage - Testing Supplies
23. Work Surface - Mail Sorting
24. Clothes Closet

Storage cabinets above and below items 2, 3, 4, 5, 6, 12, 17, 18. Visual aid panel above items 20, 23. Tool racks above items 8, 9, 10, 11.
between the business and shop activities. Figure 1 is a floor plan of the Mobile Unit.

One week before the van arrives, the assistant project director visits the school to discuss the evaluation process with the special education teacher, the principal, and the guidance counselor. Each special education student is reviewed within the context of past performance and the information in the school record. The assistant project director then meets with students in the special class to introduce them to the Mobile Unit and to explain the purpose of vocational education and how it will affect them.

Before the Unit arrives, the evaluator aide administers a number of group tests to the students in their classroom, including basic arithmetic, measuring, lettering, the Picture Interest Inventory, and the individually administered Purdue Pegboard Test. Such tests help the evaluators assess the students' basic ability to handle numerical and verbal concepts. Students are also asked to complete a trial job application and a checklist of work samples or vocational "tryouts" that interest them, and they list the classes in which they are already enrolled. This information is ready for the evaluator when the van arrives.

When the Mobile Unit arrives, students visit the van, explore its contents, and meet the staff. After an orientation period and individual interviews, each student is exposed to a series of work samples under the guidance and careful observation of the evaluation team. Individual standardized tests are also administered at appropriate intervals.

The work sample is basically a set of instructions outlining the steps necessary to complete a task or some portion of a job related task, for example, reproducing a typewritten page. The work samples are accompanied by oral instructions from the evaluators to guide students with low level reading abilities. Work samples are available in the following areas:

**Assembly work**
- Sorting and stapling
- Nut, washer, and bolt assembly

**Clerical work**
- Adding machine
- Calculator
- Cash register
- Checking and coding
- Duplicator
- Filing: alphabetical, chronological, and code
- Mail Clerk: depository, zip, folding, inserting, opening, dating, sealing, and postal scale
- Sales book
- Stock clerk
- Typing

**Shop work**
- Drill press
- Pattern layout, use of power machinery
Most work samples are based on a modification of the Testing Orientation and Work Evaluation in Rehabilitation (TOWER) system published by the Institute for the Crippled and Disabled, New York. The evaluator uses the basic TOWER rating scale and format to structure the various work samples. As individual tasks are gradually increased in complexity, the evaluator and evaluator aide can observe how completely students perform a task, how far they can progress in task complexity, and how well they function under a variety of conditions as they move toward their maximum level of ability.

The evaluator and aide work as a team in observing behaviors, administering tests, and ensuring that each student gets a maximum of individual attention while working in the Mobile Unit. The small number of students involved during each evaluation process makes individual attention and encouragement possible. The evaluator is responsible for administering individual tests in the Unit and for recording behavioral observations. Anecdotal comments, analysis of work sample performance and test results are typically used to document student performance. The evaluator aide assists in observing behaviors and is primarily responsible for supervising students as they experiment with various samples. What follows is a description of a typical week in the Mobile Unit:

**DAY ONE:** The evaluator introduces each work sample, presents a tool safety film, and interviews each student to learn more about his background and interests, and to establish rapport. He also administers individual tests including the Bennett Hand Tool Dexterity Test and a Tool Knowledge Inventory. While interviews and tests are being conducted, the evaluator aide has students begin...
work samples of their choice. First day exposure to work samples is purely exploratory.

**Day Two.** Students continue with the work samples they were doing at the end of the first day. The evaluator may also complete individual testing begun the first day.

**Day Three.** The evaluator administers the Revised Beta Exam (IQ Test) and the Crawford Small Parts Dexterity Test to each student, while the aide continues to work with students on individual work samples.

**Day Four.** All students work with individual work samples as the evaluator and aide supervise and observe behavior.

**Day Five.** Students complete their experiments with the various work samples while the evaluator holds an individual simulated job interview with each youngster. The interview is followed by a "feedback discussion" dealing with what the evaluators identify as the student's occupational strengths.

By the end of the second or third day in the Mobile Unit, each student has been exposed to a variety of work samples or occupational activities. Throughout the week, students are encouraged to explore many samples and not to focus exclusively on those with which they feel most comfortable or can do best. By the fourth or fifth day, each student has usually begun to concentrate in his area of interest and has progressed to the maximum level of complexity at which he can perform.

On the basis of results from the psychometric tests, work samples, and behavioral observations, the evaluator, in consultation with the aide, prepares a report on each student focusing on behaviors and including background information, a review of work sample performance, and a summary of recommendations for each student.

About 2 weeks after the van leaves, a Call Back Meeting is arranged to review the reports and discuss programming recommendations. The vocational evaluator meets with the teacher, guidance counselor, nurse, school vice principal, vocational rehabilitation counselor, job development coordinators, job placement counselors, the special education supervisor, and the assistant project director. Each student's ability to analyze, and reason, his cooperation, attention span, enthusiasm, dependability, maturity, punctuality, thoroughness, and attitude is discussed by this team. The evaluator suggests the type of vocational opportunities (based on a Dictionary of Occupational Titles) that may be appropriate for each student's potential.

Copies of the report are submitted to the job development coordinator, the pupil personnel worker, the school, the DVR counselor, and the office of special education. Within the school setting, the teacher, the guidance counselor, or whoever has regular contact with the student's family, may discuss the report with parents, advising them of their child's potential and what educational plans are being formulated to help the student achieve independence.

A notable feature of the Mobile Unit is its role as a facilitator in coordinating and improving services for special education and handicapped students. One of the goals of the Mobile Unit is to assist

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**DAY TWO**

**DAY THREE**

**DAY FOUR**

**DAY FIVE**

**EVALUATION AND FOLLOW UP**

**Results shared with all staff**

**Parents advised of student's potential**

**NOTABLE FEATURES OF THE MOBILE UNIT**
Goal: appropriate curriculum for student needs

the school in preparing curriculum geared to the needs of each individual and to help teachers and counselors secure appropriate inschool work experiences for students. Special education students, while enrolled in regular homerooms, may receive instruction in four special curriculum areas: vocational English, focusing on job related vocabulary and reading skills; consumer math, for mathematics skills required to perform practical transactions; citizenship, which includes everything from building social competencies to current events; and occupation training which includes job development and the acquisition of social skills necessary to perform well on the job.

Based on the Mobile Unit's assessment of student abilities and limitations, the special education teacher can work more closely with the industrial arts teacher and other school personnel who deal with the student. Identification of the student's abilities also increases his chances of being integrated into regular classes such as basic math, reading, and other elective subjects. However, it is in the area of career development that vocational evaluation has its greatest impact. With the knowledge of each student's strengths and weaknesses, the special education teacher can begin to develop individualized instruction based on occupational needs and can focus on appropriate aspects of occupational training—job preparation, social skills, and job interviews.

The Mobile Unit: a facilitator

The Mobile Unit serves as a facilitator in bringing together the services of several programs for special education and handicapped students in Baltimore County. Because the Unit provides diagnostic information on a student's potential, it is possible to hasten placement in programs outside the regular school while the student concurrently works toward graduation. The evaluation process typically makes possible more successful placement in the Community Centered Work Experience Program; more direction in placing a student in one of Baltimore County's three vocational tech centers or the Turner Occupational Center for further vocational training; early intervention on the part of the DVR counselor who, because of the Unit's evaluation, can secure DVR services for students in the 10th grade and provide systematic follow up beyond graduation; more realistic information for parents, teachers, and counselors to help develop a student's potential in a vocational area in which he is most likely to succeed.

The linkages between the Mobile Unit and the Community Centered Work Experience Program are described here to illustrate the project's cooperative role in providing comprehensive services to special education students. The Community Centered Work Experience Program provides an opportunity for students, as part of their school curriculum, to participate as work trainees in realistic job positions in their communities. Previously, a student was enrolled in the community program only after he had served successfully in various inschool work experience programs. Because the Mobile Unit is now able to provide the job development coordinators and teachers with more accurate assessment data, the student may be deemed ready either for immediate community work experience or the inschool work experience.

Using information made available by the project, the two county job development coordinators can now also offer several
job placement alternatives for each special education student. Although the Coordinators lead this effort, the Mobile Unit evaluation also assists school counselors, Vocational Rehabilitation Counselors, and special education teachers in placing students in appropriate skills training or work experience to maximize their potential.

The Mobile Unit for Vocational Evaluation offers diagnostic services to Baltimore County 10th grade students in 15 special education classes for the intellectually limited and to the severely limited or orthopedically handicapped who are occasionally in need of this service. The state standard for classification as "intellectually limited" is an IQ range of from 50 through 79. However, students placed in some special education classes may also have emotional and/or physical problems which result in learning difficulties. An average high school special education class has 15 students.

All 10th grade students enrolled in the special education program are candidates for the Mobile Unit evaluation. During 1972-73, the staff expect to serve more than 150 students in these classes throughout the county. Rosters of potential students for evaluation are compiled on the basis of junior high class lists submitted prior to van scheduling early in the fall. Most students evaluated in the current academic year have been participating in special education classes since the primary grades.

Once students have undergone vocational evaluation, the resulting report facilitates several avenues for further development. On the basis of the report, a student might be recommended for further training in his local school, further skills training in one of the vocational technical centers, participation in the Community Centered Work Experience Program, or the services of Vocational Rehabilitation.
THE STAFF

In addition to the project director, the Mobile Unit is staffed by an assistant project director, a vocational evaluator, an evaluator aide, and a fulltime secretary. All staff are hired by the Baltimore County Board of Education. The project director, who is employed by the county as a supervisor of special education, supervises van activities and coordinates these activities with other programs. Since the Unit is part of the office of special education, the director is able to work closely with other county and state special education personnel. In addition, he establishes liaison with the two county job development coordinators who assist in placing students on the job following their vocational evaluation.

The Assistant Project Director

The assistant project director is responsible for the day to day operations of the Unit and supervision of Unit staff, working in close coordination with counselors from the Division of Vocational Rehabilitation, school counselors, and associated teaching and administrative staff at each of the participating schools. He acts as a public relations coordinator with community agencies and as advisor to the people or groups interested in initiating vocational evaluation programs.

The evaluator

Evaluators must be certified by the Maryland State Board of Education. The present Mobile Unit evaluator was formerly a counselor with the State Division of Vocational Rehabilitation; the evaluator aide was recruited from industry. Both received extensive training arranged by the Baltimore County office of special education in conjunction with the state department of education. The following types of pre and inservice training are required of evaluators and available to other special education staff:

Coppin College, Summer, 1970, was the site of 6 weeks of training for all evaluators in the State of Maryland. The training, sponsored by the Department of Vocational Education with cooperation from the Division of Vocational Rehabilitation, focused on vocational evaluation techniques.

The Maryland Evaluator Association holds two meetings each year for evaluators to discuss techniques and make presentations on evaluation and vocational education projects.

The University of Maryland, Summer, 1971 and 1972, was the site of one week of presentations by leading authorities on current evaluation methods. The workshop was attended by evaluators and evaluator aides throughout the state.

A Summer, 1972, workshop involved more than 15 special education teachers, on a stipend from the Division of Vocational Technical Education, who participated in work experiences identical to those to which students are assigned. Teachers were placed in industry, food services, hospitals, machine shops, and retail outlets for 3 weeks. On a rotating basis, teachers experienced five different occupations and then wrote job descriptions based on their observations of what was required for each occupation.

Conferences are held every year for counselors throughout the state who are involved in various aspects of the evaluation and placement of special education students. Counselors are advised on
new methods for developing individualized learning programs for students.

In addition to these opportunities, teachers, counselors, evaluators, and administrators meet to share information on ways to develop new and innovative approaches for serving children with special education needs. The Mobile Unit staff has visited several training institutions for evaluators and schools for teachers of children with special needs.

The Mobile Unit’s contact with parents includes the initial orientation to the evaluation facility and the post evaluation conference with teacher, evaluator, and other staff. Parents may also be involved in the school activities of their children through PTA conferences held four times a year. For the most part, each teacher supervising a classroom of special education students takes the responsibility for providing parents with an opportunity to discuss their child’s progress. The Mobile Unit’s greatest service to parents is felt to be its role in providing them with a realistic assessment of their child’s employment potential.

The Mobile Unit for Vocational Evaluation has received tremendous support from various agencies and businesses throughout Baltimore County. In addition to special education materials provided by the County Board of Education, the Unit has received hardware from businesses, including gas pumps, office equipment, and shop equipment, all of which broaden the number of occupational hands-on experiences students are exposed to in the trailer.

The Mobile Unit staff also makes referrals for further evaluation or training to many cooperating community agencies, including:

- *Sinai Hospital Rehabilitation Unit*, which offers further diagnostic services and treatment to those with special handicapping conditions.
- *Baltimore League for Crippled Children and Adults*, which offers sheltered workshops, diagnostic, treatment, therapy, and adjutive services.
- *Maryland Association for the Retarded*, which offers diagnostic and training services to the retarded.
- *Baltimore Goodwill Industries*, with vocational rehabilitation services and job training for the handicapped.
- *Maryland Workshop for the Blind*, which offers comprehensive services to the blind.
- *Maryland Comprehensive Rehabilitation Center (DVR)*, with comprehensive diagnostic, treatment, and training services for the handicapped.
- *Turner Occupational Center*, which has work adjustment and personal adjustment training for the mildly mentally retarded.
Western Vocational Technical Center, which offers a career lab for job exploration and vocational training and placement. Eastern Vocational High School, which has occupational exploration and training programs.

**PROGRAM EVALUATION**

- The Mobile Unit for Vocational Evaluation is in the process of compiling follow up data on all the graduates from Baltimore County high schools who have participated in the evaluation since 1970. The follow up results are available at this time. The Unit has also used some informal evaluation procedures to measure its level of success in serving youngsters with special needs. Findings are described in the following paragraphs.

Guidance counselors at each of the 15 high schools have reported significant changes in terms of more individualized instruction for students, greater student participation in regular classrooms, and increased integration of special education students into total school activities.

Administrators, special education teachers, and industrial arts teachers have all stated that the evaluation data have increased the level of participation of special education students in the in-school work experience program and in the industrial arts program. In addition, the evaluation information has increased the level of communication and cooperative planning among these educators.

The job development coordinators have stated that the project's evaluation information has increased their success in placing special education students in community centered work situations satisfactory to both employer and student. Employers have indicated that students who participated in vocational evaluation have tended
to adjust better and to be more persistent in their work, and generally to have developed a more mature attitude toward work.

As a result of the Mobile Unit's evaluation and coordinating efforts, each student is followed up, counseled, and/or assisted by a DVR counselor, the school counselor, the teacher, and the job development coordinators. Former procedures tended to be sporadic and unsystematic. A long range follow up on each student is now being administratively organized by the Mobile Unit staff, the school and DVR counselors, the job development coordinators, and staff in the Office of Special Education.

Before the project was initiated, DVR counselors did not usually register special education students until the 12th grade. Because the Mobile Unit evaluation enables the DVR counselor to identify each student's skills and interests (without the cost to DVR or private evaluation services), the counselor can now register all special education students in the 10th grade. The result has been early intervention in securing the services of DVR for special education services, more successful and earlier placement in training programs or jobs, a reduction in DVR evaluation costs, an increase in the amount of follow up on each student, and a changing attitude on the part of parents and students in accepting DVR services.

In addition, school counselors and teachers have indicated that, in many cases, parents tend to take an increased interest in the child's progress in school and tend to be more persistent in encouraging the student to complete his formal school program once the evaluation team has gauged his potential.
Project SERVE

Serving educable mentally retarded students in Grades 10 through 12, Project SERVE personnel work in a special classroom in local high schools in carrying out individualized programs in vocational education. In this unique program students are scheduled for a half day in class and a half day working in the community.
OVERVIEW OF PROJECT SERVE

SERVE is a vocationally oriented high school program serving approximately 437 educable mentally retarded students, students with special learning and behavioral problems, and other special needs in the St. Paul, Minnesota, area. The program is designed to prepare students in Grades 10 through 12 for job placement upon graduation and to develop work habits and social skills required for self-sufficiency and total integration into the community. The SERVE model emphasizes, where possible, the normalization and integration of the handicapped student as he moves into the mainstream of secondary education and ultimately into a competitive work environment.

Preparing students for job placement

A special classroom in each high school is the locus of activity for half the school day. Here, a teacher/job coordinator works with approximately 15 students to carry out an individualized program in vocational education and job related academic and social activities. For the remainder of the school day, students are scheduled for on the job training in the school district or the community, or they take specific job training at the area vocational high school.

Half day devoted to vocational education.

SERVE combines three state agencies

SERVE is also an administrative model for the coordination of program and fiscal resources for the handicapped on the local and state levels. SERVE is an acronym for three state agencies — special education, rehabilitation, and vocational education — and is intended to symbolize their combined efforts in the support and implementation of local SERVE programs. Since 1970, the SERVE concept has been implemented in 14 St. Paul school districts and has been translated into specific statewide guidelines for establishing and funding similar programs in the public school system.

THE CONTEXT OF THE PROGRAM

In 1966, four special education directors representing school districts in the East Metropolitan area of St. Paul began meeting to formulate ideas for improving services to the handicapped. Recognizing the lack of adequate resources in individual districts, the special educators focused on a plan to provide programs on a cooperative interdistrict basis. The discussions led in 1969 to the establishment of the East Metropolitan Special Education Council (EMSEC), an umbrella agency for coordinating special education projects in 17 member districts. With the help of local school district, state, and federal (Office of Education, Bureau of Education for the Handicapped) monies, EMSEC's Executive Director, special educators, and school administrators began developing guidelines for a model work experience program and mapping out a strategy for state level coordination of resources.

Establishing an umbrella agency

Goals and objectives for a model program were formulated, along with a program description identifying students to be served, admission criteria, required personnel and program resources, and guidelines for organization and operation. The most significant phase of the planning, however, addressed the issue of how three state education agencies — special education, rehabilitation, and vocational education — could coordinate resources within the

Coordinating efforts within existing legislative framework
framework of existing legislation to provide occupationally oriented programs for the handicapped. The EMSEC executive director worked with local school personnel and state agency representatives to identify areas of commonality in which the agencies could legally cooperate without dismantling existing programs and duplicating efforts.

In March, 1970, EMSEC presented its SERVE proposal to the State Department of Education. This proposal included the specific program prototype and the formal conceptualization of interagency cooperation. Approval was received in summer, 1970, and four school districts implemented the program during 1970-71. Since then, 13 additional SERVE programs have been established in the St. Paul area, and some 30 or more projects, following the SERVE concept, are operating throughout the state of Minnesota.

The state played a responsive role in the initiation of the program and continues to function as a sponsoring agent in approving locally initiated and formulated SERVE proposals. Typically, individual SERVE programs adhere to the overall philosophy and goals of the SERVE concept, but vary with respect to kinds of students served, curricula materials, program organization, and so on. The first year costs of running a SERVE program are divided among the three state agencies and the local education agency. Vocational rehabilitation, special education, and vocational education funds are generally used for SERVE personnel salaries. During subsequent years, the local school district must assume a greater proportion of operating costs as vocational education funds are withdrawn.

- Fifteen students work with a teacher/job coordinator (SERVE Coordinator) for approximately half the school day in a SERVE classroom. Here the teacher designs individualized programs for each pupil combining academic and occupational skill activities with work experiences in a mix appropriate for the student's needs. Personality development, social skills, and good work attitudes are also stressed. Most SERVE coordinators avoid traditional curriculum and learning materials that frequently prove irrelevant to their students' needs and abilities. Rather, instruction focuses on what is practical and often includes everyday materials (newspapers, recipes, etc.). Lessons may focus on cooking pizza for lunch, or discussing current events, football scores, and the like.

All pupils are expected to achieve measurable reading capacity and minimum arithmetic skills at the third grade level by age 18. These skills are usually taught indirectly using occupationally oriented materials and activities that focus on basic competencies: letter writing, job applications, grocery lists, reading maps, newspapers, recipes, making budgets, and keeping financial records. The introduction of academics into the program is usually limited to those skills essential for independent living and is closely coordinated with the specific job skill requirements.

Materials are available to help students learn about the working
world, to explore information about specific occupations, to begin to acquire basic competencies and skills in preparation for job placement. Additionally, individualized occupational activities in the classroom are closely coordinated with students’ work experience to help improve their performance on the job. For example, if a student working in the cafeteria finds it difficult to measure ingredients, the classroom program will be modified to include practice with solid and liquid measurements. Some classes also use commercial workbooks addressing topics such as taxes, looking for a job, banking, and other work-related subjects. These materials are always geared to the reading level of SERVE students.

SERVE students are not isolated in a special classroom. Where possible, they participate in regular classes such as physical education, vocational education, and industrial arts courses, cooking classes for both males and females, and so on. Maximum flexibility is built into student schedules so they can move onto the mainstream as their needs, interests, and abilities change. Students also mix with other high school students at lunch time and after school. They are particularly encouraged to participate fully in extracurricular activities that do not conflict with job schedules.

The instructional program is further enriched through field trips to businesses and industry, guest speakers, and other recreational activities designed to promote communication and enhance social skills.

Each student receives a number of work experiences in different kinds of settings before high school graduation. The number and types of placements will depend on the individual’s abilities and interests, and will be made by both the SERVE coordinator and the vocational rehabilitation counselor through formal evaluation and assessment of vocational readiness and skills. The work experience portion of the program is more than a job. It is designed not only to train the student in a specific skill, but also to help him establish effective work habits transferable to any job.

Ninth and tenth grade entering pupils are normally assigned to semi-sheltered jobs within the school district for several hours a day, for example, cafeteria service, custodial work, building and grounds maintenance, or clerical work. A number of work positions are also available in programs coordinated by EMSEC. This work experience, keyed to an instructional program, serves vocational exploration rather than specific job training purposes.

At the tenth, eleventh, and twelfth grade levels, the emphasis shifts to job placement outside the sheltered school environment. Students work for at least 3 hours a day in community gas stations, restaurants, nursing homes, greenhouses, auto mechanics shops, shoe stores, and light industry. Other placement opportunities are available for students who are unable to perform in a competitive work situation or who prefer alternative training programs such as semi-sheltered workshops, occupational training centers, or specific job training at the District 916 Vo-Tech Institute.
The SERVE coordinator monitors each student's work experience, making frequent on the job visits, keeping close contact with employers and resolving any problems between student and employer. The employer is required to submit progress reports evaluating the student trainee's personal and work habits, job performance, and social skills.

The teacher/coordinator provides weekly counseling and review sessions for each student to determine problems and progress in both GUIDANCE AND COUNSELING.

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classroom and on the job experiences. The instructor must also take into consideration the long range goals for each student as he moves through high school and into the community, coordinating plans with the vocational adjustment coordinator or vocational rehabilitation counselor assigned by the state’s Department of Vocational Rehabilitation.

**Placement and follow up**

On completion of the high school program, or at age 21, SERVE students are placed in jobs or referred to the VR counselor for further training. Placement is determined by the SERVE coordinator, the VR counselor, and the school psychologist, based on the student’s case history, evaluation, classroom performance, and work experience. Every effort is made to place graduating seniors in full-time, competitive jobs, but students are also expected to actively seek out and apply for employment. Continued employment in a work training station after graduation is discouraged, since students should be able to demonstrate that they know how to get and keep a job. Approximately 70 percent of SERVE’s graduates find positions in service occupations, while others are employed in offices or industrial plants. Some elect to continue training at 916 Vo-Tech Institute under the guidance of the SERVE Center staff. If, upon graduation, a student is unable to work in a community job, he may be placed in a sheltered workshop, receiving assistance from the VR counselor until deemed employable.

**Thirty day follow up required.**

the VR counselor is required to follow up job placements for a minimum period of 30 days. Many SERVE coordinators have informally kept records on graduate students for as long as 3 years. While such procedures are not required, they provide an indication of the continued employability of SERVE students. No long term follow up and evaluation of SERVE students is required or planned at this time.

**UNIPACS**

By September, 1973, SERVE programs throughout the state plan to be using UNIPACS, a new curriculum consisting of 83 individualized learning packets. During a 6 week summer institute in 1972, a team of 24 writers, 6 consultants, and support staff worked to produce these materials. This effort was jointly funded for $52,000 by special education and vocational rehabilitation.

Individual UNIPACS are approximately 50 to 60 pages long, which together provide a sequenced program for all special needs students enrolled in high school work experience programs. Units cover such topics as human relations, self-understanding, how to work, why work, lifestyle, and leisure time, as well as instruction in specific occupational courses and related skills. The packets were developed in response to a need for easy to use, nontraditional learning materials for handicapped students. SERVE wanted materials with a reading level appropriate for educable mentally retarded and other special students, materials different from those which students often associate with past failures. UNIPACS contain practical and relevant materials designed to prepare a student not only for a job, but also for independent living and full integration into the community. The
packets are designed to be flexible, offering variety and choice for each student’s needs and interests.

A noteworthy feature of the SERVE program, fundamental to its success, is the concept of interagency cooperation. SERVE represents a cooperative working relationship among three Department of Education agencies — special education section; division of vocational education; division of vocational rehabilitation. But SERVE also symbolizes changing concepts of each agency’s role and responsibility and a breakdown of barriers associated with rigid single purpose agency mandates.

Prior to SERVE’s inception, each agency and its associated programs operated rather autonomously. According to state representatives, vocational education courses were not geared to the needs of the handicapped and, as a rule, handicapped students had not been enrolled in vocational education courses. Instructional materials and their presentation were often inappropriate for handicapped students, and vocational education teachers traditionally had no specific training in special education techniques, nor were they familiar with special students’ needs. Special education, on the other hand, addressed itself almost exclusively to standard basic skills courses. Little if any emphasis was placed on vocational preparation for the future or on providing necessary work experience. Many special education students, consequently, dropped out of school or graduated with little preparation for competitive job employment. Most became vocational rehabilitation clients with limited vocational and life skills. Job placement was difficult, if not impossible.

As a result of the SERVE concept, the three agencies reevaluated the traditional definitions of their mandates and developed several exemplary cooperative arrangements:

Where teacher/coordinators had typically specialized exclusively in special education or vocational education, now they are required to be certified in both fields.

The Division of Vocational Rehabilitation has placed new emphasis on early intervention and has broadened its mandate to include services to many high school aged handicapped students.

VR’s data system is being used cooperatively to collect and store data on SERVE clients. This information is retrievable and available to all the agencies involved.

All three agencies, together with the local educational agency, jointly fund SERVE personnel salaries.

The coordinator of vocational programs for the handicapped is a vocational education position paid for by special education funds; this Coordinator is accountable to both agencies.

The vocational adjustment coordinator is responsible to both the local public schools and the district VR office.
The original UNIPACs grant was jointly funded by special education and vocational education.

The new 916 Vo-Tech Institute is a regular vocational education facility which enrolls both SERVE and nonhandicapped students.

In addition to the SERVE programs operating in the local high schools, a special SERVE Center has recently been established at the area vocational high school, Intermediate District 916 Vo-Tech Institute. The Center's aim is to involve students with vocational handicaps — physical, emotional, intellectual, educational, or cultural disadvantages — in all training programs offered at the Institute, and to serve any student enrolled in the Institute who demonstrates a need for special help. Additionally, it works on a cooperative basis with students from six regular high school SERVE programs located in the intermediary district. These students leave their high schools on a daily part-time basis to attend Vo-Tech classes. The Center is currently working with 85 pregraduate students and 127 postgraduates enrolled in more than half of the 53 Vo-Tech courses.

The 916 Center is designed to help students select, prepare for, and enter appropriate vocations. Services to special needs students include a career exploration and prevocational orientation program, a vocational evaluation program, counseling and individualized tutoring, and personal and work adjustment guidance to prepare students for independent living and full employment. The SERVE Center is not an isolated program within the Institute; Center staff simply provide support services to special needs students integrated into regular classrooms. A special SERVE program director works with a staff of eight to provide the following services:

All students referred to the SERVE Center receive an orientation to the Institute and the world of work. In one hour blocks of time students are introduced to the working world and to various industries via slide/tape presentations. Using a checklist, students can select work areas that interest them and see more detailed slide presentations. The orientation process also includes instruction in independent living skills and personal work adjustment.

Now under construction, this Center will serve fifty students on a half day basis. (Students may work in the Center from 1 to 6 weeks prior to being placed in regular Vo-Tech courses.) The Center will house numerous simulated work stations in metalwork, laundry service, food service, and so on, where a student can try out different jobs. The try out is a sequenced learning experience designed to evaluate the student's interest and abilities in various jobs and his potential for success. Two instructor/evaluators monitor the students (on a 1:5 teacher/student ratio) and are responsible for evaluation, placement in regular Vo-Tech programs, in house follow up and work adjustment.

Three SERVE instructional aides are available to provide any SERVE student with individualized help in completing his course of studies.
study. The aide is responsible for counseling behavioral and motivational problems, and for providing instructional assistance. They do no classroom teaching themselves, but serve as floating counselors to both regular vocational teachers and their special needs students.

**SERVE RESOURCES CENTER**

A Learning Resources Center is now being set up to provide back up curriculum materials for all SERVE students (those working in the Evaluation Center and those enrolled in regular classes). The Center offers literature geared to the SERVE student's reading level and extensive self-paced, self-instructional audiovisual materials.

**THE PROGRAM'S POPULATION**

SERVE provides work experience programs for special students between the ages of 14 and 21. Approximately 437 students are currently enrolled in 17 programs operating in 13 EMSEC school districts. Eighty-five of these students attend the 916 Vo-Tech Institute, where an additional 127 postgraduate students are enrolled in the SERVE Center. Approximately two-thirds of the students are male, although the male/female ratio varies from program to program.

SERVE clients are students who can benefit from educational alternatives to the traditional academic classroom and who have handicaps which prevent them from participating in regular vocational programs. Most individual programs focus primarily on the educable mentally retarded (80 percent) and students with special learning and behavior problems (20 percent). The specific number and types of students accepted into local SERVE programs depend on local objectives and priorities, size of the school district, and availability of local funds. Some districts accept only the mentally retarded while others also serve emotionally disturbed and culturally disadvantaged students.

**SELECTION OF STUDENTS**

SERVE students may come from either special education classes or the school's mainstream program and are typically identified for the program by teachers, counselors, or the special education staff. All recommendations are presented to a screening committee composed of the school principal, the special education director, the vocational education director, the school psychologist, the SERVE coordinator and the vocational rehabilitation counselor assigned to the school. The committee reviews case files, including referral, diagnostic and assessment information, and makes a placement decision.

In order to qualify for the program, students must be developed socially to the extent that they can function in a work experience program, and they must meet the handicapped criteria specified in state Department of Education guidelines. Acceptance is also based on the student's demonstrated interest in going on to high school and parental interest and willingness to help him do so. Within this general framework, local programs may develop more specific admission criteria. One typical senior high school SERVE program selects students who have completed junior high school and
performed well in a school setting, have shown interest in preparing for eventual full employment and have the potential to do work appropriate to their ability, and who are motivated to improve themselves.

When a student has been accepted into the SERVE program, usually on a first year trial basis, the Teacher/Job Coordinator contacts his parents, assigns staff to work with him, and outlines an individualized program.

Each of the local SERVE programs employs at least one teacher/job coordinator (also called SERVE coordinator) fulltime, and has the parttime services of either a vocational adjustment coordinator (VAC) or a vocational rehabilitation (VR) counselor. In addition, all the special services personnel in the school district, including speech therapists, nursing staff, tutors, social workers, psychologists, counselors, and remedial reading teachers, provide back up support to teachers and students through the school district's director of special services. Local vocational education staff also participate in the program when SERVE students are enrolled in their classes. SERVE programs located in School District No. 916 may receive services from the SERVE Center staff at the Vo-Tech Institute.

Specific staff patterns and division of labor vary from program to program. The following descriptions, however, are fairly representative of all SERVE programs:

These are key staff, each having responsibility for about 15 students. The coordinator's day is divided between classroom and community activities including job development, employer contacts, monitoring work stations, and public relations. He or she is responsible for developing an individualized plan for each student and implementing that plan in the classroom and community work stations. Other responsibilities are curriculum development, teaching basic skills, work adjustment, work evaluation, referrals, and coordination of the student's total program. Operating under an extended contract, he also helps students make the transition to summer vacation and retain their jobs during this period.

These people are contributed by the division of vocational rehabilitation to SERVE. They work with SERVE and other handicapped students ages 16 or older as Vocational Rehabilitation clients, counseling them, securing jobs, training, and other vocational services. VR case service monies are available to purchase these services. The rehabilitation counselor or VAC continues to serve any student still not employed upon graduation. For those who are successfully placed, the counselor provides follow up. Both the VAC and the VR counselor are supervised by the district VR office and must follow the regulations to fulfill the reporting requirements of that agency.

While the positions are quite similar, several differences between the VAC and the VR counselor should be underscored. The VAC,
Unlike the VR counselor who works with many clients in addition to the handicapped students he may serve, is a specialist working exclusively with students. He tends to have a professional background in education rather than vocational rehabilitation. The rehabilitation counselor is a VR employee, while the VAC is an employee of the school district, responsible both to the district and to VR. Only those school districts which participated in the VAC program when it was initiated in the 1960s have VACs; other districts are served by VR counselors.

**RECRUITMENT AND SELECTION OF STAFF**

- Staff recruitment and selection (except for the rehabilitation counselor) are accomplished through the regular hiring channels of the public school system. Frequently, SERVE staff were previously employed by the schools in another capacity (e.g., special education teacher) and were active in initiating SERVE in their areas. While originally teacher/job coordinators tended to have either special education or vocational education backgrounds, they are now required to be certified in both fields. SERVE coordinators must
also have skills not usually associated with teaching, such as an ability to relate to community members, and to promote the program through public relations.

Both pre and inservice training institutes have been sponsored by EMSEC over the past 2 years for SERVE coordinators and other school personnel working with the handicapped. The training program offers both free and tuition course work varying in length from 2 days to 2 months. Topics cover special education as well as vocational and industrial education areas as they relate to special students, and focus on guidance, counseling, and measurement techniques for behavioral assessment. Most courses are taught by University of Minnesota faculty and earn from 3 to 6 quarter credits. Some credits may be applied toward dual certification in special education and vocational education.

Three courses, one required for all SERVE coordinators, were offered in summer, 1971; three additional institutes were presented during the 1971-72 school year and a special workshop was arranged in summer, 1972, at the 916 Vo-Tech Institute. Similar programs are

**TRAINING OF STAFF**

**Focus on working with the handicapped**

**Courses and institutes required**
scheduled through 1976 under a new four phase Special Study Institute recently funded by the state special education section. The institutes are open to all personnel within the EMSEC school districts who are associated with programs for the handicapped. Enrollment, however, is usually limited and priorities must be established by identifying which groups can most benefit from a particular institute offering.

PARENTS AND SERVE

☐ The SERVE program requires that parents be fully informed and supportive of the work experience program and their child's individualized instructional set up. Parents are consulted before a youngster is enrolled in SERVE, and two consent forms must be signed prior to student placement in work experience. The Parent-School Counseling Agreement and the Job Placement Agreement, together with an initial conference with the SERVE coordinator, are officially required and designed to inform parents of the program's objectives and to clarify parental responsibility. Parents are similarly involved in the assessment of their child's abilities and potential when he completes the high school program and is ready for full time employment.

Total involvement

☐ SERVE coordinators meet with parents in both the home and school setting to promote parental support and to ensure that parents are fully aware of their child's problems and progress. Newsletters, report cards, open houses, and written reports are also typical of the media used by some programs to provide feedback to parents.

Becoming aware of problems and progress

RECRUITING COMMUNITY RESOURCES

 unborn

Service coordinators and other school personnel are actively engaged in a variety of projects to enhance visibility of the SERVE program in the community. Such projects, designed to recruit prospective employers, and to promote understanding of SERVE students' special needs and talents, include the distribution of informative brochures, public service radio broadcasts, presentations before service groups such as local associations for retarded children, and the establishment of ongoing relationships with business and community leaders.

Community advisory councils

Community advisory councils composed of representatives from industry, public and private agencies, parents, educators, and concerned community members. While they have no decision making authority, the councils bring together a resource group with many areas of expertise and provide professional council in specific job skill training.

SERVE EVALUATION AT THE INTERDISTRICT LEVEL

☐ Because SERVEs are subject to the policy structures of their local school districts, each project is responsible for establishing its own
evaluation design to assess program operations and student achievement. Thus far, no funds have been appropriated by the state or jointly set aside by the school districts to conduct an overall long term evaluation.

EMSEC, as coordinating agency, evaluates programs in each district in terms of how many students receive these services (using 1969-70 as a base line). Since SERVE operates at the interdistrict and the state level as a concept of interagency cooperation and not as a single program, success can be measured only in terms of the effectiveness of the administrative model in channeling resources to local districts for start up and continued operation. From this perspective, SERVE has proved to be a successful coordinating mechanism in the establishment of some 45 programs throughout the state of Minnesota.
Data on the number of SERVE graduates and type of employment secured or further training provided are available from school case files and vocational rehabilitation records. Formal VR and informal teacher/job coordinator follow up provides additional information relative to the stated SERVE goal of full employment for all students. With the exception of VR records, however, there is no central data file at this time. Data collection, recordkeeping, and evaluation remain the responsibility of the individual, autonomous school districts.

Each SERVE program is required by law to maintain complete records comparable to those required for other students in public schools for all SERVE students, including report card and test data, personal and family data, case histories, work experience records, attendance records, and job progress reports. Funding agencies specify that all SERVE programs must also have an evaluation component which reports evaluation findings and outcomes in terms of program objectives.

Because no two SERVE programs are exactly alike, each program develops its own evaluation procedures and techniques to define program goals, assess progress, and determine student achievement. Common evaluation procedures include:

SERVE personnel are generally required to submit periodic progress reports and year end reports including a profile of student enrollment and status, changes in student status, a review of the VAC or VR counselor's activities, a summary of significant events or changes in program operation, and a statement of problems encountered. Such progress reports are normally reviewed by the school administration including the directors of special education and vocational education. In some cases, administrators also prepare independent evaluation reports on the SERVE program.

All students must be evaluated by the school psychologist and a screening committee prior to enrollment in SERVE. Standard test batteries, interest and reading tests, and vocational skills assessments may be administered. When a student enters SERVE, he does so on a one year trial basis. His subsequent progress is assessed in the following ways:

- Teachers are responsible for designing evaluation instruments that measure acquisition of behavioral objectives and the appropriateness of selected materials.
- Individual student progress reports are submitted to the school administrators on a regular basis.
- Employers are required to submit evaluation forms on trainees to help determine their social adjustment and job training progress.
- Vocational rehabilitation personnel provide medical and vocational evaluation at comprehensive rehabilitation centers.
- The Vo-Tech Institute Serve Evaluation Center will provide extensive testing services, work sample testing, and job tryout for a 6 week evaluation period.
FULLERTON, CALIFORNIA

Project Worker

The teenaged handicapped job seeker is prepared by Project Worker with the job entry skills he will need to enter the working community. The Project makes extensive use of videotape for on campus pre-employment instruction as well as for on the job performance evaluation.
OVERVIEW OF PROJECT WORKER

Project Worker of Fullerton, California, attempts to bring together the teenaged handicapped job seeker and the world of work by providing educable mentally retarded, educationally handicapped (learning disabled), and orthopedically handicapped high school students with job entry skills. Students learn how to locate jobs in the community, job interview techniques, selected job skills, and perform on and off campus job training. Project Worker's primary goal is not merely job placement for handicapped students, but placement in better jobs with higher skill levels and pay than are traditionally available for these students. The Project makes extensive use of videotapes for on campus preemployment instruction, orientation training in specific job skills, employment facilitation, and performance evaluation.

The program serves approximately 220 students (grades 9 through 12) in the Fullerton Union High School District (encompassing the Los Angeles suburbs of Buena Park, Fullerton, La Habra, Lowell, and Yorba Linda). Not a self-contained program, Project Worker is incorporated into 23 special education classes in 8 high schools throughout the district. The extent to which individual classes incorporate the Project Worker program varies considerably, depending for the most part on the teacher's attitude toward vocational education. As understanding and support for vocational education grow, so does Project Worker.

THE CONTEXT OF PROJECT WORKER

In 1969 the Fullerton Union High School District's administrator of instructional services and the director of exceptional pupil services conducted an informal assessment which revealed that the district's special education programs were not preparing handicapped students with the marketable skills necessary for them to make it in the world of work. In a proposal to the Bureau of Education for the Handicapped in May, 1969, the administrators suggested a vocational program which would offer students training in specific job skills through videotape techniques.

Initiated in September, 1969, Project Worker set about making contacts with local industry for job placement and videotaping of various occupational skills. In the schools, preemployment training began, followed by job placement and student on the job performance evaluation. As it has grown, the program has improved its taping equipment and techniques and has produced approximately 90 tapes dealing with occupations in food services, medical services, general manufacturing, machine trades, and others. In 1970-71, Project Worker developed a cooperative plan with the state Department of Vocational Rehabilitation to assist in vocational counseling, training, and placement of students on the job. The program's staff, aside from the 23 special education teachers in district high schools, consists of 3 fulltime people who draw on the district's considerable resources, both personnel and technical, to help meet the Project's goals.
Financial support for Project Worker

Project Worker has two sources of federal support: the Elementary and Secondary Education Act and Vocational Education Act funds allocated through the State Department of Education. On the local level, the Fullerton Union High School District has matched these federal funds for the past 3 years and has accepted the major financial responsibility for maintaining the program in the future. Program budget is approximately $60,000 per year, with federal funds supplying about half for the equipment, and the district supplying the other half for project personnel.

THE PROJECT WORKER CONCEPT

☐ Each high school teacher selects those aspects of Project Worker which fit the curriculum needs of his classroom, revising and adapting where necessary. The greater the emphasis on vocational goals the more the Project Worker model is incorporated.

The program is intended to begin in the student’s freshman year of high school with preemployment training. Students prepare complete listings of community jobs, using telephone directories and newspapers. They practice locating the various jobs using local newspaper want ads and the Yellow Pages of the telephone directory. They also use the telephone and a tape recorder to practice calls to a prospective employer. Preemployment training also uses role playing with the teacher acting as a potential employer. These sessions were videotaped and played back for critique purposes, and a checklist is used as a critique instrument. Although the extent to which this activity is used varies from class to class, it is one of the major tasks performed with Project Worker equipment.

Freshmen involved in preemployment training.

Selection of a particular job area

The next step is selection of a particular job area. Students are shown the Project’s Job Overview tapes depicting workers at their actual job stations performing routine tasks. These tapes give students an idea of skills needed and general working conditions for a particular job. In consultation with the Project’s work experience counselor and his own teacher, the student determines which area he wishes to specialize in. If he needs help, the counselor administers a variety of tests, usually including the General Aptitude Test Battery, to help him determine his strongest areas.

Exploratory work in job area

Students now do exploratory work in their job areas by working for a limited period (less than a total of 30 hours) at a particular vocation. If they enjoy the occupation, they proceed to specific job skills taught by mock-ups which are simulated situations often involving machines donated by business and industry and videotapes. The Project uses two kinds of tapes for detailed classroom training:

SKILL APPLICATION TAPES

1. Skill Application Tapes. Used to demonstrate how a particular task is performed by providing step by step instructions. In many cases, a specific tool or machine, or a simulated model, is required. The student watches the tape as many times as needed before practicing the task along with, or immediately after, the tape. For example, each step in operating a drapery machine is explained in detail and demonstrated on tape. When he is ready, the student practices on a machine lent by the company.
Figure 1. Sample Page From Videotape Catalogue

### AUTOMOTIVE SERVICES

**JOB TITLE:** Service Station Attendant

<table>
<thead>
<tr>
<th>Type of Tape</th>
<th>Subject</th>
<th>Company</th>
<th>Seq.</th>
<th>Length</th>
<th>Catalog No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview</td>
<td>----</td>
<td>Bob's Shell</td>
<td>1</td>
<td>6:40</td>
<td>WA0-0A1.1</td>
</tr>
<tr>
<td>Overview</td>
<td>Seven Steps to Success (Short Cartoon Introduction)</td>
<td>Standard Oil</td>
<td>1</td>
<td>11:00</td>
<td>WA2-0A1.1</td>
</tr>
<tr>
<td>Overview</td>
<td>Seven Steps to Success (Detailed Explanation of Each Step)</td>
<td>Standard Oil</td>
<td>2</td>
<td>23:00</td>
<td>WA2-0A1.1</td>
</tr>
<tr>
<td>Overview</td>
<td>Capital for Quality (Information on Gas Station Products)</td>
<td>Standard Oil</td>
<td>1</td>
<td>20:00</td>
<td>WA2-OB1.1</td>
</tr>
<tr>
<td>Skill Drill</td>
<td>Gasoline Credit Cards</td>
<td>Standard Oil</td>
<td>1</td>
<td>20:00</td>
<td>WA2-OB3.1</td>
</tr>
<tr>
<td>Skill Appl.</td>
<td>How to Use the Credit Card Imprinter</td>
<td>Standard Oil</td>
<td>1</td>
<td>10:00</td>
<td>WA2-OC2.1</td>
</tr>
<tr>
<td>Skill Appl.</td>
<td>How to Use the Specification Book</td>
<td>Standard Oil</td>
<td>1</td>
<td>20:00</td>
<td>WA2-DD2.1</td>
</tr>
<tr>
<td>Skill Appl.</td>
<td>How to Use the Price Book</td>
<td>Standard Oil</td>
<td>1</td>
<td>10:00</td>
<td>WA2-OE2.1</td>
</tr>
<tr>
<td>Skill Appl.</td>
<td>Filling Out the Work Order</td>
<td>Standard Oil</td>
<td>1</td>
<td>30:00</td>
<td>WA2-OF2.1</td>
</tr>
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</table>

### FOOD SERVICES

**JOB TITLE:** Waitress

<table>
<thead>
<tr>
<th>Type of Tape</th>
<th>Subject</th>
<th>Company</th>
<th>Seq.</th>
<th>Length</th>
<th>Catalog No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview</td>
<td>----</td>
<td>Alphy's</td>
<td>1</td>
<td>17:20</td>
<td>AA0-0A1.1</td>
</tr>
<tr>
<td>Skill Drill</td>
<td>Food Identification</td>
<td>Alphy's</td>
<td>1</td>
<td>17:00</td>
<td>AA0-0A3.1</td>
</tr>
<tr>
<td>Skill Drill</td>
<td>Food Identification</td>
<td>Alphy's</td>
<td>2</td>
<td>25:00</td>
<td>AA0-0A3.2</td>
</tr>
<tr>
<td>Skill Drill</td>
<td>Menu Abbreviations</td>
<td>Alphy's</td>
<td>1</td>
<td>15:00</td>
<td>AA0-OB3.1</td>
</tr>
<tr>
<td>Skill Drill</td>
<td>Menu Reading</td>
<td>Alphy's</td>
<td>1</td>
<td>28:20</td>
<td>AA0-OC3.1</td>
</tr>
<tr>
<td>Skill Drill</td>
<td>Menu Reading</td>
<td>Alphy's</td>
<td>2</td>
<td>27:00</td>
<td>AA0-OC3.2</td>
</tr>
<tr>
<td>Skill Drill</td>
<td>Waitress Dialogue</td>
<td>Alphy's</td>
<td>1</td>
<td>18:00</td>
<td>AA0-DD3.1</td>
</tr>
<tr>
<td>Skill Appl.</td>
<td>Preparing Fountain Items</td>
<td>Alphy's</td>
<td>1</td>
<td>16:30</td>
<td>AA0-0E3.1</td>
</tr>
</tbody>
</table>

2. **Skill Drill Tapes.** This is a teaching machine method using a programmed flash card technique. Explanation and demonstration of how to perform a task is followed by a series of problems. For example, instructions on how to fill out a Master Charge sales slip is followed by a series of problems with different items, prices, and departments. There are also skill drill tapes for general related skills such as addition and change making. Figure 1 includes samples from the tape catalogue to illustrate the kinds of tapes prepared for two service occupations.

All tapes are accompanied by appropriate student materials (sales tax charts, etc.) and teacher manuals, which include the relevant job description, a list of necessary equipment and materials and their sources, the behavioral objectives of the lessons, training procedures, forms of evaluation, and problem answers.
When the student is able to perform the job without help from the tape, he is himself taped in the classroom in simulated working conditions. Student and teacher compare this tape with worker performances on the skill tapes, and errors are corrected through further practice.

In their sophomore year, students receive on campus work assignments to help them adapt to a working situation and to gain skills in a less demanding and more closely supervised position than in the outside world. In the junior year, students are placed in part-time jobs in the community where they continue to work during their senior year.

When students feel competent in their chosen skill areas, they are taped at work in the classroom, and the tape is shown to an employer who may hire the student or make recommendations for further training. In the latter case, the student is retaped when he feels ready. Once employed, the student is closely supervised by his employer and the work experience counselor, and is offered individual or group counseling to help him adjust to the world of work.

The program is extremely flexible. If students who are referred to the Project need further testing or additional services, the work experience counselor refers them to the Department of Vocational Rehabilitation. Those who enter after the freshman year and already have basic skills can take an on campus job with supervision or a part-time off campus job with reinforcement in the classroom. Those with higher level skills are referred to the more advanced Regional Occupation Program. Students with difficult behavioral problems are referred to the Goodwill Evaluation Center for training.

Again, the objective of Project Worker is to place handicapped students in jobs that they traditionally could not attain. The program trains its students in specific vocations so that upon graduation they leave not with a limited general education, but with a mastered, marketable job skill.

**PROJECT WORKER’S POPULATION**

Project Worker serves 221 students in 23 District special education classes: 98 educable mentally retarded (EMR) students; 197 educationally handicapped (EH) students; and 27 orthopedically handicapped (OH) students. The students come from families ranging from lower to upper middle class, with a majority in the lower middle class category. Ten percent of the students are from minority groups — 8 percent are Spanish-American, the rest divided among Black, Oriental, American Indian, and other groups.

**SELECTION OF STUDENTS**

Students are referred to the program by parents, teachers, school counselors, or administrators. Approximately 70 percent of all EMR, EH, and OH students in the district are involved to some extent in Project Worker. EMR students have, on the whole, been more actively involved in the program than other kinds of handicapped students because most EMR teachers have readily adopted the Project’s goals. Teachers of the EH students have not accepted the
program's philosophy as readily and only minimally involve their students in Project Worker curriculum. (They may use some of the Project's videotapes as supplementary materials or may occasionally place a student in work-study.) The EH teachers are not willing to accept vocational education as a valid, primary goal for their students either because they view their students as potentially college bound and not in need of vocational preparation, or because they feel that accepting vocational education fosters an undesirable link between their students and those in EMR classes who are involved in Project Worker. Project staff point out that, unfortunately, most of the EH students have not continued with college and have left high school without marketable skills.

Orthopedically handicapped students are less involved in the Project than EMR and EH students. The Project's training tapes are directed toward the larger audience, and although a single tape may be applicable to both EMR and EH students, it is often not appropriate for OH students, whose physical handicaps severely limit their range of employment. Even within the OH category, the various types of handicaps create a broad range of capabilities and limitations which would require tapes on a one to one basis. This is financially prohibitive for Project Worker. Until the needs of these students can be met individually, their participation in the program will remain minimal.

Students who are involved in the complete Project Worker program are matched up with jobs in the community and usually begin to work parttime in their junior year. Past student placements have included such occupations as assembler, teacher's aide, cook, lab assistant, and picture framer. These students continue their parttime work until graduation, when they become fulltime employees.

The follow up process begins while the student is still in school working parttime and involves three procedures:
1. Once a week the student fills out a progress report with the employer's signature indicating the number of hours worked.
2. Once each quarter the employer fills out a progress report.
3. At least once each quarter the work experience counselor visits the employer to discuss the student's performance.

This form of follow up helps ensure a placement appropriate for both the employer and the employee. It is also used to evaluate and refine the program itself. After students have graduated from Project Worker, either the special education department head or the work experience counselor maintains contact in order to compile statistical data for program evaluation.

Project Worker's staff consists of three fulltime people: the work experience counselor, a television technical advisor, and a clerk-typist (in addition to some support personnel from the school district).

1. Work Experience Counselor. This person is the link between the
community, teachers, students, television crew, and the administrative staff. In addition to the guidance and testing activities already mentioned, he coordinates the planning and production of videotapes taking into account the needs of students and requests of teachers. He helps teachers develop training programs, contacts community employers, and establishes work stations and job opportunities. He also supervises students on the job and compiles evaluation data.

**Television technical advisor**

**SCHOOL DISTRICT STAFF**

2. **Television Technical Advisor.** He directs the production of videotapes, helps write and produce scripts and tapes, organizes the Project's videotape bank, and supervises a taping crew at the Instructional Materials Center in Fullerton.

**The director**

1. **Director of Exceptional Pupil Services.** The director administers all special education programs for the district. His Project Worker responsibilities include program development, inservice training, budgets, and staff selection. He is directly responsible to the district's administrator of instructional services.

**Coordinator of instructional materials**

2. **Coordinator of Instructional Materials.** The coordinator is responsible for all instructional materials, audiovisual equipment and texts, and the development of the library programs in the district. He acts in an advisory capacity for all media aspects of the program.

**Coordinator of vocational education**

3. **Coordinator of Vocational Education.** As coordinator of all district vocational programs, this individual supervises Project Worker's day to day operations, including planning and videotape production, and placement and supervision of students by the work experience counselor.

The Instructional Materials Center is the audiovisual resource center for the District and provides supportive services to Project Worker, particularly to the Television Technical Advisor and the part-time Video Technician. The Center is the operating base for the Project's staff and depository for the occupational videotape bank. As mentioned earlier, the District has a contract with the State Department of Vocational Rehabilitation for one full-time counselor and ancillary services for handicapped children, including evaluation, financial support for training schools, transportation or health needs, and job placement.

Although the program does not have any volunteers, it does receive free services from various sources. The Fullerton Union High School District makes available to students and teachers in special programs the services of 35 fulltime counselors, one halftime and four fulltime psychologists. Also, the district is under contract with the North Orange Child Guidance Center for psychiatric evaluation services. A licensed neurological pediatrician is employed as needed.

**Free services from various sources**

**STAFF SELECTION**

Special education teachers and Project Worker staff are interviewed by school district personnel and, if they pass the initial screening, are referred to the director of exceptional pupil services. He, along with the administrator of instructional services and the
coordinator of vocational education, selects Project Worker staff and special education teachers. If the position is for that of a teacher, the applicant is sent on to the school principal for final approval.

The director of exceptional pupil services, when looking for new teachers, seeks out innovative people and those who have had experience in elementary education. He feels this background can help a teacher deal with the behavior and learning styles of students in special classes.

A 2 week preservice training workshop, sponsored by the Project was held in the summer, 1971, to expand special education teachers' knowledge of instructional media. Teachers saw demonstrations of equipment, toured the Instructional Materials Center, and participated in workshops on multimedia techniques. Discussions centered on behavioral goals, vocational education, and state resources and rehabilitation services. Project staff feel that future training efforts should also include efforts to improve teacher attitudes toward vocational education since current attitudes hinder the program's operations.

Bimonthly meetings led by the Project Director are held for special education, department heads or head teachers from each
Career Education

school to discuss problems, determine priorities, review draft scripts for new tapes, and discuss new programs. There is also a monthly meeting for District special education teachers which often breaks into smaller groups to discuss problems and needs.

Although there is no specific parent program for Project Worker, each high school conducts monthly parent-teacher meetings for parents of special education students. Planned by the parents themselves, these meetings often include discussions of vocational education and Project Worker. Many parents, like teachers, do not see vocational education as a valid part of the school's curriculum and maintain unrealistically high academic goals for their children. Project staff feel that parent attitudes would change if more teachers had a positive attitude toward the program.

Community involvement, especially on the part of local employers, is essential to Project Worker's success. Local businesses contribute to the program by allowing staff to film employees on the job, by employing students part-time while they are in school, and by supplying materials and equipment for simulated training in the classrooms.

To obtain commitments from these employers, the work experience counselor has spoken to gatherings of local service groups, the Rotary Club, the Chamber of Commerce, and has met with the managers of large businesses such as restaurant chains and department stores. Over the past few years, satisfied employers have recommended the program to other employers, and this word of mouth campaign is generally meeting the Project's communication needs. Students profit from the chance to work, and employers profit by getting workers already trained for a specific task.

When working with an employer for the first time, the Counselor tries to place one of his better students on the job to give the employer a good first impression of the program and make him more willing to accept other students. If the student is not successful, the counselor finds that many employers are agreeable to breaking the job into two shifts for two students or eliminating some of the responsibilities.

An audit team from the state Department of Education and members of the district staff, annually visit Project Worker to interview staff, students, and teachers. The resulting narrative report written by the auditors includes recommendations for program changes. Staff responds by detailing the steps planned to remedy the problems noted. In addition, quarterly reports are written by the counselor of vocational education, focusing primarily on statistical data such as numbers of students involved and turnover rate.

A more internal form of evaluation is the rating of videotapes. In response to a recommendation made by the audit team, an evaluation form was developed to indicate the extent of usage and the quality of each tape. Every time a teacher uses a new tape he
### Figure 2. Sample of Tape Rating

<table>
<thead>
<tr>
<th>TAPE TITLE</th>
<th>SUBJECT MATTER QUALITY</th>
<th>TECHNICAL QUALITY</th>
<th>TAPE USAGE FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Med</td>
<td>High</td>
</tr>
<tr>
<td>Adding Columns of Numbers</td>
<td>0</td>
<td>0</td>
<td>9</td>
</tr>
</tbody>
</table>

**TEACHER COMMENTS:** "Very good--need one for subtraction and multiplication." "Looks like a very usable tape for students having addition problems. Also excellent training for service station and restaurant work." "Loved it--writing on picture really involved student in learning more than ever."

<table>
<thead>
<tr>
<th>TAPE TITLE</th>
<th>SUBJECT MATTER QUALITY</th>
<th>TECHNICAL QUALITY</th>
<th>TAPE USAGE FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Med</td>
<td>High</td>
</tr>
<tr>
<td>Basic Addition</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
</tbody>
</table>

**TEACHER COMMENT:** Equipment not available when needed." "Although the machine was not available when it could be used, this is the type of drill I need for my students and would like to see more of this type. It, however, needs to be used very frequently to be effective. The TV has not been usable because it has been in other academic areas."

<table>
<thead>
<tr>
<th>TAPE TITLE</th>
<th>SUBJECT MATTER QUALITY</th>
<th>TECHNICAL QUALITY</th>
<th>TAPE USAGE FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Med</td>
<td>High</td>
</tr>
<tr>
<td>Changing</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

**TEACHER COMMENTS:** "Tape pacing was too slow. There should be consistency in the way change was shown back to student so he could match his actual change with TV example."

<table>
<thead>
<tr>
<th>TAPE TITLE</th>
<th>SUBJECT MATTER QUALITY</th>
<th>TECHNICAL QUALITY</th>
<th>TAPE USAGE FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Med</td>
<td>High</td>
</tr>
<tr>
<td>Registering Patrons</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Telephone Answering</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Checking Out Books</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Stamping Date Cards</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Filing Cards</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

*Number of Responses

Determining growth of graduated students

rates the technical and subject matter quality as low, medium, or high, and records any additional comments. The results of these ratings are tallied and the tapes are refined accordingly. A sample tape rating format (Figure 2) is included at the end of this section.

As previously mentioned, students are evaluated during their part-time job placement to judge the quality of training and the appropriateness of placement, and are evaluated again after graduation. This effort culminated this year with the publication of the Third Year Final Evaluation Report. Data from the graduates of...
The data proved the latter three hypotheses to be as true as there was a significant decrease in the absentee rate and the number of job changes and an increase in the self-image scores. Despite the fact that there were not significant gains in the number of students employed nor their dollar earning power, the program staff feels that Project Worker has demonstrated that "significant modifications can be made in terms of student attitudes toward themselves, their work and the world in which they must live."

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*Based on earnings received for a one month period following graduation and projected to ten months  
**Data not available at this time
ST. PAUL, MINNESOTA

The Technical Vocational Program for Deaf Students

TVID is a post secondary training program demonstrating the feasibility of using an existing school usually serving hearing students to train deaf students. This program helps deaf students pursue advanced vocational and technical training by providing a wide selection and flexibility in their studies. Supportive services such as counseling, interpreting, and auditory training help students adjust to working in the community.
OVERVIEW: THE TECHNICAL VOCATIONAL INSTITUTE

Training postsecondary deaf students

The Technical Vocational Institute's Program for Deaf Students (TVID) is a postsecondary training program for deaf and hearing impaired students located in the St. Paul Area Technical Vocational Institute (TVI), one of Minnesota's 34 Area Vocational Institutes. The program aims to demonstrate the feasibility of using an existing institute which customarily serves hearing students to train postsecondary deaf students as well. In addition, it seeks to reverse the traditional underemployment of deaf students which has resulted from a severe lack of postsecondary training facilities. The TVID program, located in a modern, well-equipped facility, is currently helping some 98 deaf and hearing impaired young people pursue advanced vocational and technical training with wide selection and flexibility in their studies.

A 12 week preparatory program

The TVID program consists of a 12 week preparatory program designed to help deaf students in their initial social, vocational, and academic adjustment, followed by enrollment with hearing students in regular TVI courses in trade and industrial, technical, business and distributive, health, and service areas. An array of supportive services including counseling, interpreting, note taking, tutoring, and auditory training, is also offered to help students integrate. Concurrently with TVID, a media program is developing specialized media for handicapped students.

THE CONTEXT OF THE TVID PROGRAM

Putting programs for the deaf in perspective

The history of the TVID program is best understood in terms of postsecondary programs for the deaf in general. Until 1968, Gallaudet College in Washington, D.C., was the only postsecondary facility for the deaf in the United States. The mission of Gallaudet College is to provide a liberal arts education to deaf students capable of pursuing a baccalaureate degree. There remained an acute need for postsecondary opportunities for all deaf students. At a series of national meetings in the mid 1960s, educators of the deaf recommended that a National Technical Institute for the Deaf and three regional technical vocational programs be established. The regional programs would be located in existing vocational settings where deaf students could receive their training with hearing students. The US Social and Rehabilitation Service (SRS) and the US Office of Education's Bureau of Education for the Handicapped (BEH) assumed responsibility for sponsoring these programs and began to review grant applications from across the country.

Efforts to develop a plan

The State of Minnesota's rehabilitation consultant for deafness conducted an investigation of facilities in the St. Paul area and felt the St. Paul Technical Vocational Institute offered excellent opportunities for such a program. Working with TVI's coordinator of curriculum and its counselor for the handicapped and with the state commissioner of vocational rehabilitation, a plan was drawn up. The proposal was submitted to BEH and SRS by the commissioner of the division of vocational...
rehabilitation, the Minnesota Association of the Deaf and others, and a planning grant was received in February, 1969.

The consultant became project director and gained the formal approval of the St. Paul Board of Education. An initial needs survey was conducted regarding the numbers, types, and geographic locations of students to be served; other related programs were visited; the components of the proposed program were outlined; and the necessary staff and job descriptions were developed. Operational funds were awarded and the program got underway in September, 1969. In addition to this program, two other postsecondary programs for the deaf and a National Technical Institute for the Deaf were funded in other regions of the country.

Administered through the St. Paul Public Schools system, the TVID program functions as an integral part of the overall TVI program, with many policy decisions made in conjunction with TVI administrative staff. Total budget for TVID in 1972-73 was approximately $198,500, of which some 38 percent came from SRS, 38 percent from BEH, and 24 percent from state vocational education monies. Although Minnesota students over 21 and out of state students pay $560 tuition each year, in most cases the state department of vocational rehabilitation reimburses these costs.

☐ If a student has demonstrated a clearly defined training objective and the potential for success in the area of his choice, he may be permitted to enter the regular program directly. The majority of deaf students begin their course of study as preparatory students. The preparatory program enables students to: (a) adjust to TVI, (b) adjust to independent living, (c) learn to use supportive services, (d) continue basic academic preparedness, (e) develop secure peer group identification, and (f) have opportunity to select a major area of study with skilled assistance. Career selection and personal growth are critical elements of the 12 week preparatory program.

The preparatory program is designed for 12 weeks, 5 days a week, with each of the six courses meeting one hour a day. The courses offered include:

1. **Communications.** Communications enables the student to identify common problems in English usage, spelling, punctuation, and capitalization to help him express himself clearly and concisely through written, spoken, and manual responses. Student requirements include a term paper and periodic examinations on class related material.

2. **Mathematics.** Mathematics provides all students with basic mathematical skills such as addition, subtraction, multiplication, division, fractions and decimals, linear measurement, and its practical application of these concepts. For those students who have mastered these skills, algebra and trigonometry are available.
At all levels, students proceed at their own pace and are evaluated individually when they feel they have mastered the subject matter. Additionally, this course offers prephysics presentations since more than half of the Regular Programs at TVI require the successful completion of a course in physics for graduation.

3. **Personal Management.** Personal management helps students identify and effectively handle practical management problems in life through units in banking, housing, budgeting, credit, insurance, taxes (the law and legal aid), and grooming (personality and the wise use of leisure time). Much of the classroom time is devoted to seminars and group discussions. Program staff feel this course is perhaps the most important for the students since it gives them direction and guidance for independent living.

4. **Vocational Exploration.** Vocational exploration provides the student with a basic knowledge of the programs offered at TVI and helps him select a field of concentration. This course addresses questions such as: what kinds of skills and personalities are best suited to a particular occupation? what kinds of constraints and benefits does this occupation have? According to staff and students alike, this course offered the students much needed assistance in acquainting them with the world of work and in helping them make suitable vocational choices.

5. **Family Management Seminar.** The family management seminar is conducted by the preparatory instructors. Many aspects of family life, personal growth, and interpersonal relationships are discussed. A unique aspect of the seminar is participation by staff members of the United Hospitals, St. Paul. United Hospitals presents a
lecture-discussion on personal health care and health-delivery systems.

6. Formulas (for men). Formulas strengthen young men's backgrounds in math and science so they can be successful in the technically oriented courses of TVI's regular program.

Once a student has decided on the vocational area he wants to pursue, staff develop a mini curriculum or readiness curriculum to prepare him for the rigors of that area of study. For example, if a student decides to continue his or her training in general office practices, staff prepare a curriculum which introduces the student to fundamental training concepts such as margins, salutations, spacing, block type, and so forth. Many of these mini curricula are now being turned into multimedia instructional packages in a related federally funded project (Media Services and Captioned Films) located at St. Paul TVI. This project hopes to develop relevant vocational education media for deaf and other handicapped students. Guidelines for media materials development and production, field testing and national distribution are being developed with the National Center for Educational Media and Materials for the Handicapped, Ohio State University.

Once the preparatory program is completed, the student is ready to select a field of concentration in TVI's regular program or in programs offered at other St. Paul-Minneapolis postsecondary facilities including technical vocational institutes, junior colleges, and 4 year colleges.

TVI's regular program offers 40 fields of concentration in the major areas of technical education, business and distributive education, trade and industrial education, and health and services. The varied courses in these fields include apparel arts, auto body, chemical technology, cosmetology, dental technology, graphic arts, plumbing, and watchmaking. A student's program will take between 10 and 27 months, depending on the skills required for his particular occupation. Each course usually begins with lecture demonstration periods. As courses progress, students work independently in training situations on the job. Deaf students are evaluated and graduate according to the same criteria for hearing students; these criteria vary according to the vocational area.

Deaf students have been integrated into 27 of TVI's regular program areas, with graphic arts and general office practices the most popular fields for TVID students. According to several regular instructors who have taught TVID students, the work performance of the deaf students, both academically and in the vocational skill areas, has been at least equal to that of the hearing students. Instructors attribute the successful performance and integration of deaf students into their classes to the supportive services offered by TVID. Selected students participate...
in TVID's emerging career education consortium program. Under the consortium program, students may select areas of study at other postsecondary institutions throughout the metropolitan area receiving supportive services from TVI.

**SUPPORTIVE SERVICES**

*Interpreting*  
A staff of fifteen interpreters assist deaf students in their regular classes. In addition to interpreting, interpreters provide tutoring services and assist in developing mini curricula. Interpreters also function in a variety of school activities with deaf students including the TVI student union, assemblies, and field trips. Interpreters frequently assist deaf graduates on job interviews and provide interpreting services on the job.

*Counseling*  
Counseling is offered as needed by the program's two counselors, mostly on issues pertaining to training area selection. Many students also need to talk about everyday problems such as encounters with roommates, housing and money problems, adjustment problems in regular classes, and so on.

*Note taking*  
In an attempt to bring hearing students in contact with deaf students at the beginning of the regular program, TVID has asked for student volunteers to take double sets of notes in classes, one for themselves and one for a deaf student. To make this easy, the program has purchased special carbon paper; the student simply takes his notes as usual and gives the carbon copy to a deaf student. Not only does it increase interaction between the two groups of students, this process also increases the deaf student's chances for success in the regular program. Staff have had no trouble recruiting hearing students for this service. In fact, many hearing students have even taken courses in sign language taught by members of the TVID staff to help them communicate with their deaf counterparts.

*Tutoring*  
Hearing students, TVID staff, and teachers in the regular program provide tutoring to deaf students as needed. This service has been used most in the preparatory program.

*Auditory training*  
Auditory Training. The St. Paul Public School System's Special Education Section provides TVID with a speech therapist who devotes a minimum of 20 percent of his time to the Program. The therapist screens the hearing and speech of every student entering TVID to identify which students can profit from speech therapy and auditory training. The decision to use these services is made by the therapist in conjunction with individual students. Generally, 25 to 30 percent of the students use these services on a continuing basis.

*Extracurricular activities encouraged.*  
Extracurricular Activities. In addition to these supportive services, the program offers students a host of extracurricular activities such as participation in the student council, membership in various regular program clubs, and intramural sports. Participation in these activities is encouraged because of interaction between hearing and deaf students occurs most naturally in
these informal settings. Of particular interest to deaf students at TVID is the Deaf Drama Club.

The Drama Club regularly performs throughout the community at various schools and civic affairs, and at neighboring colleges and churches.

As mentioned earlier, there has historically been an overwhelming lack of postsecondary facilities for deaf students and even fewer programs offering integrated educational opportunities at this level. At St. Paul's Technical Vocational Institute, staff have attempted to integrate deaf and hearing impaired students into regular classrooms to help prepare them for future job and social roles in the hearing world.

The preparatory program plays a major role in TVID's successful integration efforts. Most students entering TVID are recent graduates of residential schools for the deaf and few have had previous experience either in living independently from their families or residential schools or in integrated educational settings. By giving students a hand with personal adjustment, choice of vocational area and initial basic training, the preparatory programs offers a head start in preparing special students for the vocational, academic, and social demands of regular classrooms. Interpreters and note takers are also considered essential to successful integration. Most of TVID's students come from educational backgrounds in which they rely heavily on manual communication. Lip reading and speech skills are in many cases limited. Interpreters assist deaf students wherever needed in class, in shop or lab, in other student activities, in job interviews, and in some cases, on the job. Student note takers have also proven indispensable both academically and as an aid to further integration and interaction between deaf students and their hearing counterparts.
A third element in effective integration is TVID's administrative organization. Several of the regular TVI staff play essential roles in the deaf program, particularly the TVI curriculum coordinator, the counselor for the handicapped, and the school nurse. In addition, many regular teachers become involved with the TVID program as deaf students enter their classes, and TVID staff may assume functions in the regular program. For instance, several of the preparatory program instructors also teach regular TVI classes, and one of TVID's counselors advises all students in the graphic arts major, both hearing and deaf. These administrative interrelationships have enabled TVID staff and students to become integral members of the Institute as a whole. The overall organization of the project has helped prevent the deaf program from becoming a self-contained program within a larger campus.

THE POPULATION OF TVID

TVID participants come from a variety of educational and geographic backgrounds. Students this year have been recruited from 30 states, the District of Columbia, and Canada, with Minnesota, Wisconsin, and Illinois leading in the distribution. Average age of the students is 15 years. All students in the program have some degree of hearing loss, ranging from mild to profound. In fall, 1973, there were 100 students enrolled in the preparatory program and in regular classes; approximately 65 percent of this group were male. By June, 1974, more than 400 deaf students will have been enrolled since the program's inception in September, 1969.

There is a great diversity in the educational backgrounds of TVID's students. Although the program does not require a high school diploma for admission, most students have completed high school and some have had postsecondary training. Some students come from day schools and public schools, but the majority are graduates of residential schools for the deaf. While enrolled in the TVID program, students reside in apartments or boarding houses in the St. Paul area. Housing assistance is provided by the program when necessary.

RECRUITMENT AND SELECTION

Students who have hearing losses which restrict their opportunities for success in regular post high school programs and who meet the requirements for vocational rehabilitation in their respective states are eligible for TVID. It is also required that students either be graduates of high school or have been out of high school for at least one year. Program staff have identified several attributes they consider important in the selection process. The level and nature of the applicant's social behavior is of primary importance, and staff are concerned with previous school records. Good skills in the reading and math areas are desirable as well as competency and aptitude in work skill areas. For those previously employed, employment records...
are reviewed for evidence of performance, conduct, dependability, and interest.

In the first year of the project, information about the program was sent primarily to residential schools, private schools, day classes for the deaf, and agencies providing services to the deaf in the Midwest. Aware that a significant number of the deaf population was still not being reached, staff began recruiting students by contacting state departments of vocational rehabilitation throughout the country and talking with educators and administrators at conferences, workshops, and other programs serving deaf students. TVID graduates have been a valuable source for recruiting other deaf students as well.

Students can apply directly to TVID for any one of the four quarters by submitting appropriate applications; school records; psychological testing reports; health and audiological reports. Although it is not necessary that the student's application be approved by the state department of vocational rehabilitation, this approval is encouraged since the department offers funding, placement, and follow up opportunities.

The program accepts students in the spring of the year for the following four quarters. Qualified students not accepted are placed on an alternate list for openings available should prospective students change their minds. Applications are reviewed and final selection is made by the program's two counselors. Where geographically possible, students are asked to visit the program for personal interviews. In cases where the applicant's qualifications are questionable, the director reviews the application and helps the counselors reach a final decision.

Job opportunities in the St. Paul-Minneapolis area are explored primarily by the program's two counselors, but regular TVI teachers also provide valuable placement information since many of them have had careers in industry and business. Various community agencies such as vocational rehabilitation, manpower services, and parent groups also help secure placement for TVID students. For students seeking employment outside the St. Paul area, the student's parents, and the state department of vocational rehabilitation are contacted to assist with placement.

The program has been quite successful with its student placement in part because TVI has established itself in the community as an excellent technical vocational facility and employers are confident that they will receive well qualified people. Initially, there was some reluctance among employers to offer positions to deaf students, but this subsided once they observed student adjustment and performance on the job. Now the program frequently receives calls from employers requesting a student to fill a job opening.

When job opportunities have been located for students, the counselor arranges for job interviews and one of the counselors...
or interpreters goes along to help communication between the employer and the student. This arrangement also helps assure the employer that staff will cooperate in seeing that the student and employer develop a good working relationship. In some cases, the interpreter stays with the student for the first few days or week on the job to help him with the transition. Many companies conduct an employee evaluation after 3 months on the job, and the counseling/interpreting staff also help with these sessions.

**FOLLOW UP**

A large percentage of TVID's graduates choose to remain in the St. Paul-Minneapolis area because they have made friends in the program, because they have become familiar with St. Paul, and because job opportunities are relatively diversified and promising in the community. Since most of them return to visit TVI and/or some of their instructors, follow up activities with these students are frequent and informal, and many further their training at TVI with evening courses. The program's counselors also periodically visit students and employers on the job.

For the students who have chosen to return to their home states or secure employment outside the St. Paul area, follow up is somewhat more difficult. The counselor sends a follow up letter to the student within 3 months after graduation. Contact is also maintained with these students through state departments of vocational rehabilitation and parent or families.

**THE TVID STAFF**

- The TVID Program employs the following staff:
  - Coordinator (Project Director)
  - Assistant Coordinator (30 percent time — the remaining time spent in the regular TVI administration)
  - Counselors (2)
  - Preparatory Program Teachers (3)
  - Chief Interpreter
  - Interpreting Staff (16, working on an hourly basis)
  - Secretary

TVI offers the services of its principal, assistant principal, school nurse, speech therapist, counselor for the handicapped, media specialist, and the regular program instructors as needed.

To ensure quality, recruitment of TVID staff has been conducted on a national level through contacts with national associations and programs for the deaf. Staff recommendations for teachers and counselors must be approved by the St. Paul Board of Education and must meet the State of Minnesota's teaching certification and vocational education certification requirements.

The interpreting staff has been recruited locally. Since in the past there has been neither a state nor national training program
for interpreters, TVI initiated an Interpreter Institute in the summer of 1972. The Interpreter Institute attracts persons with a sincere interest in communicating with deaf persons, persons whose personalities appear flexible and whose school and/or job records indicate stability and perseverance.

Regular TVI program instructors receive 15 hours of preservice training as a general orientation to the Institute, part of which is devoted to explaining the deaf program, its goals, components such as counseling, notetaking, interpreting, and so on. TVI staff feel, however, that the best orientation for regular staff is the actual experience of working with deaf students in their classrooms. Counselors and preparatory teachers are available to advise the regular staff with any problems they may encounter in dealing with deaf students, and credit courses in sign language are offered by TVI as part of its inservice training program. Interest in the deaf program is evidenced by the fact that more than 80 percent of the regular instructors have enrolled in this course.

All TVI staff, including deaf program staff, are enrolled in TVI's inservice training program. Staff are required to take a minimum of 9 credit hours every 5 years in order to renew certification. Courses are offered at TVI and with the extension office of the University of Minnesota. In addition, as part of their inservice training, TVI staff attend local, state and national workshops, and conferences on technical vocational, deaf and special education, and instructional technology.

The TVID program initiated a training institute in summer, 1972, to prepare people to be interpreters for the program. A first experiment in this field, the institute trained people with minimal and in some cases no previous knowledge of deafness, the manual alphabet, and the language of signs. Designed to provide participants with at least minimum entry level skills in interpreting, the institute classes are 6 weeks, 5 days a week, with one week spent at the Junior National Association of the Deaf Camp in Pengilly, Minnesota. The institute is more than a course in sign language. Participants are introduced to the psychology of deafness and the social and emotional needs of deaf students, and are given opportunities to interact and communicate with deaf people throughout the extended session. Graduates of the Interpreter Institute find employment at TVI, in elementary, secondary, and other postsecondary institutions. One Interpreter Institute graduate is employed by the Federal Reserve Bank in Minneapolis with interpreting responsibilities for deaf employees and customers. The Interpreter Institute also trains teachers of the deaf, audiologists, speech therapists, and vocational rehabilitation counselors.
STRONG COMMUNITY TIES

TVID's strongest link with the community is through local employers. The program invites employers to annual career days where they observe the training program and the job skills of deaf students. In addition to employment opportunities for program graduates, the employers often provide special training sessions and simulated work exercises for TVI students, and they host visits at their businesses and industries. A few employers provide on-the-job training practice. For example, the state department of highways provides a practicum for TVI students in its highway technology program, and hospitals do the same for medical laboratory assistant students.

Community interest in the TVID program is illustrated by the local bank, which, in addition to hiring several of the program's graduates, enrolled one of its hearing employees in the Interpreter Institute to help deaf employees and customers more...
effectively. Other community agencies supporting the project are local churches which offer captioned films for students; a local hospital out patient clinic which provides medical care, referrals, and instruction; a medical clinic for eye, ear, and nose problems; parent groups; and a private organization which offers educational and social activities for deaf students.

The TVID program also works closely with the St. Paul City school system, offering courses in sign language to parents and teachers and providing information on TVID to all secondary level St. Paul teachers. Staff have hosted a training workshop for all teachers of the hearing impaired in St. Paul and meet regularly with staff of the state school for the deaf in Minnesota and nearby states. Working relationships have also been established with Minnesota’s state departments of vocational rehabilitation, special education, vocational education, and public welfare, the University of Minnesota, the Minnesota Association of the Deaf, and with parent groups.

From 1969 to 1972, the Bureau of Education for the Handicapped and the Social Rehabilitation Service contracted with the University of Pittsburgh’s Special Education and Rehabilitation Department to conduct an outside evaluation of the three federally funded regional technical vocational programs (including TVID). The evaluation was to assess the impact of these programs as training mechanisms for postsecondary deaf students and ultimately to lead to the development of comprehensive guidelines for establishing and conducting effective integrated programs. The shifting of this responsibility to the University of Minnesota in 1972 has resulted in a delay in evaluation. Consequently, findings are just beginning to emerge.

TVID’s placement rate serves as a reliable indicator of the program’s effectiveness. The success rate is stated as being 97.2 percent. Of this percent, 4.7 of TVID graduates are continuing education. Totally 91.5 percent of all graduates are employed, and 84.9 percent of all TVID graduates are employed in the area of their training.

These placement figures indicate that the program’s deaf students are having the same success in obtaining suitable entry level employment as are their hearing peers.

TVID’s director uses an annual staff critique form to obtain formal feedback on program effectiveness. The questionnaire elicits staff views on training needs and problems, opinions on the various program components, and recommendations for the following year. These questionnaires guide staff planning for subsequent years, and have contributed to the development of the Interpreter Institute; the offering of an Intermediate Sign Language and Amestan Classes, and improved student health services; development of inservice training programs; and constant updating and refinement of the preparatory program.
PORTLAND, OREGON

Vocational Village

Vocational Village is, for most of its students, the last chance to overcome a life pattern of chronic failure and underachievement. Through an interdisciplinary curriculum of basic and career oriented education, young people from ages 14 through 21 learn to understand their worth as individuals.
OVERVIEW: VOCATIONAL VILLAGE

- Vocational Village offers personalized, career oriented education to young people ages 14 through 21 who live in the Portland, Oregon, Public School District. It serves high school dropouts, youngsters referred by penal institutions and the courts, and those transferred from regular high schools because of physical, mental, or emotional problems. For most of the students in the program, Vocational Village is the last chance to overcome a life pattern of chronic failure and underachievement.

- The program is dedicated to helping economically and educationally disadvantaged youth become independent, responsible, and productive citizens through guidance and counseling, supportive programs, an interdisciplinary curriculum of basic and career oriented education adjusted to individual needs, placement, and follow up services.

- Vocational Village is based on the assumption that every student is as worthy as his successful counterpart in the traditional high school setting, and every student has the potential for success if given personalized education opportunities. The program offers alternative channels for students which include G.E.D. preparation, certified entry level occupational competencies programs, and/or a high school diploma.

THE PROGRAM IN PERSPECTIVE

- Much of the impetus for Vocational Village came from the Portland racial riots of 1968 and the realization that many young people had become disenchanted with the traditional school setting. The same year, the Portland school board commissioned a special consultant from the state board of education to implement a program for current and potential high school dropouts. Working with an assistant director (now director), the consulting director began to shape the program. The school board leased a small building and began with 50 students drawn exclusively from the 6,000 who had dropped out of Portland high schools. Since then, more than 2,000 youths have applied at Vocational Village, and over 750 have been enrolled. Although official enrollment capacity had been established at 150 students, 237 attend day programs, and an additional 98 attend in the evening. A summer program was established in 1970, accommodating 155. In August, 1972, Vocational Village moved to a larger facility for its 454 students and 29 full and part-time staff.

- During its first year of operation, Vocational Village's administrative and program structures were somewhat undeveloped. Staff were uncertain about their teaching responsibilities and students were unclear about what was expected of them. The Program tended to operate on a day to day basis without clear skill-acquisition objectives. To help staff determine more clearly their role in directing students toward career development, the Director and staff held a series of brainstorming workshops. By 1970, the major goals of these workshops had been realized.
in staff developed teacher and student handbooks which identified the roles, rights, and responsibilities of all staff and participants involved. The program has now established itself with the Portland business community and has benefited from this relationship through donations, consultation, and student placement.

Vocational Village is directly responsible to Area III of the Portland Public Schools and is subject to the policy decisions made by the local school board. Because the program's funding comes through the school district, separate federal, state, and district funding breakdowns are not available. Proposed budget for 1973-74 totals $532,088, and it is anticipated that the school district will move closer and closer to total funding of the program.

Vocational Village is currently developing a 5 year plan which includes upgrading its curriculum, setting up satellite programs in other sectors of Portland, and developing detailed replication components for future programs.

Students who apply for admission to Vocational Village meet first with the work experience and/or the admissions counselor who assesses their attitudes, interests, and willingness to abide by the program's policies. Each student pays a $10 registration fee each year to cover student activities and processing and must also sign a student agreement binding him to the rules and regulations of the school. Prior to formal registration, the potential student is assigned to a staff member or teacher who acts as an advisor, discussing any personal problems and helping him plan his subject schedule and vocational goals. Three tests are given prior to registration: the General Aptitude Test Battery; the California Psychological Inventory; and the California Achievement Test. The test results are available to the advisor prior to entrance to identify weak areas and help in individualized curriculum planning.

Vocational Village's individualized method of instruction is based on the completion of job sheets which are single, short tasks performed independently by the student, and sequenced into entire instructional units. Because job sheets are designed to take a student progressively closer (in small steps) to skills acquisition, students of varying ability may begin an instructional unit at varying levels of difficulty, depending on their present abilities. The amount of time it takes a student to graduate is dependent on the amount of time he is willing to commit to the program and the level of achievement he sets for himself.

Students may sign up for any combination of Vocational Village's daytime, evening, and summer programs. Vocational or occupational offerings are designed to give students entry level skills in the occupational areas of their choice. Vocational courses include: industrial mechanics, food services occupations,
health services occupations, office occupations, marketing and fabrication processes (refrigeration and air conditioning, metals, and woodworking). The program also offers general G.E.D. preparation and/or a high school diploma through its basic education courses: reading, communications (English), speech, homemaking, personal health, social studies, human relations, mathematics, general science, physical education, and general business.

Each student must major in one of the occupational majors and is expected to attend classes in his major area for a minimum of 10 hours each week. Any related cluster of subjects outside the occupational major are supplementary courses and do not count as part of the required 10 hours. Although regular vocational and basic education classes are held, students work independently and at their own rate toward the completion of single job sheets and ultimately completion of an entire subject unit.

As an adjunct to the regular schedule of classes offered between 7 a.m. and 9 p.m. each weekday, the student may enroll in the work experience program. This program gives students training in an occupationally related job (part-time) while earning job sheet credit. The student learns through personal experience, the skills and attitudes needed to succeed at a particular job, and may find new occupations he wants to explore.

Vocational Village requires that students keep track of the amount of time they spend in the facility by using a time clock system designed to duplicate the kind of responsibility expected by most employers. Each student is assigned his own time card listing his name, age, and time card number. The cards are color coded, depending on the student's status as a new student, regular student on probation, or regular student in good standing. As students report to school, and as they leave, they punch in and out and place their cards in the time card rack. The time card system is used to indicate the number of hours a student spends at Vocational Village each week, and makes the student and his instructor aware of how much time he commits to the program. Comparing the amount of time spent in the facility with the number of job sheet units the student completed in that time gives both student and instructor some measure of performance, expectation, and accountability.

Because letter grades are not used and final exams are not given in many cases, it has been necessary to formulate graduation requirements based on standard achievement tests. Competency requirements established in four major areas have been set at the minimum level required for high school graduation and/or program accreditation:

**Preparation for a high school diploma**

**Selecting an occupational major**

**The work experience program**

**Time cards reinforce responsibility.**

**GRADUATION CRITERIA**
Reading: A minimum fifth grade reading level was established because it is the minimum level of adult literacy.

Mathematics: The mathematics requirement was derived by comparing CAT (California Achievement Test) mathematics tests with consumer math tests administered to high school juniors across the country. Correct answers for 70 percent of all items was considered the minimum acceptable by high schools surveyed. As a result of item by item comparison on the two tests, 73 math items on the CAT test were chosen. The 70 percent equivalent, therefore, requires 51 correct answers for graduation.

Spelling: A representative of general language ability, a sixth grade level of achievement was established as a minimum for graduation, based on CAT scores.

Vocational: Vocational competencies are required of each student, based on strict performance evaluations conducted by individual vocational instructors.

Because Vocational Village accepts all transferred credits and portions of credits from previous high schools, there is no limit set on the time it takes to graduate. Nineteen credits must be earned for graduation. One half credit is granted after completion of 45 job sheets. These 19 credits are required in addition to the minimum competency levels described above.

Job sheet requirements for graduation are:

- 3 English credits (270 job sheets)
- 3 Social Studies credits (270 job sheets)
- 2 Physical Education and Health credits (180 job sheets)
- 1 Science credit (90 job sheets)
- 1 Mathematics credit (90 job sheets)
- 9 Elective credits (810 job sheets)
- 19 Total credits for graduation.

Broken down over the period of one academic year, graduation requirements would be:

- To graduate in one year, 10 job sheets per day.
- To graduate in two years, 5 job sheets per day.
- To graduate in three years, 3 job sheets per day.

A minimum of 4 credits must be earned in one vocational major. Two of these credits may be earned in work experience if it is directly related to the student's vocational major. Not more than 3 credits of work experience can be applied to the 19 credits necessary for graduation.

THE JOB SHEETS: A NOTEWORTHY FEATURE

Unlike the traditional school situation where classes are held in groups on the basis of group learning objectives, Vocational Village emphasizes individualized learning. The basic unit of instruction is the job sheet (Figures 1-3). A job sheet prescribes a unit of work, a task to be completed by the individual...
Figure 1. Sample Job Sheet

Name ___________________________________________ Advisor ________________________________
Class _______________ J.S. No. 10 Date _______________

Unit of Work: PREPARATION FOR FINDING A JOB
Specific Job: Optional for those actually seeking employment
Objective: The student will actually apply for, make an interview appointment, and take an interview for some job in which he is interested.

Equipment: Resume - Application - Pen or Pencil

Procedure:
1. Decide on a real job that you intend to apply for and make an appointment with the interviewer in the Personnel Office or the Personnel Officer.
2. Review job sheets one to nine in this unit as preparation for the actual interview.
3. Go in early and take the interview.
4. Ask the interviewer if he will initial or sign a statement to the fact that you did come in for an interview and were interviewed.
5. Return the signed slip to the instructor and receive the bonus job sheet.

Performance Evaluation:

Instructor ________________________________
J.S. File Code ________________________________

Portland Public Schools
VOCATIONAL VILLAGE

student. It is, by design, a "bitesize" amount of curriculum that the average student can complete in an hour. Written for both vocational and basic education courses, the job sheets are sequenced into entire instructional units.

The choice of job sheets for a particular student depends on his needs, preferences, area of concentration, and the number of credits he needs for a high school completion. The staff at Vocational Village believe that a student's level of competency will noticeably improve if he can begin where he is comfortable and if he continues through progressively more demanding
### Figure 2. Sample Job Sheet

<table>
<thead>
<tr>
<th>Name</th>
<th>J.S. 1</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I.C.U. Areas:</strong></td>
<td>Office Occupations, English</td>
<td></td>
</tr>
<tr>
<td><strong>Unit of Work:</strong></td>
<td>Spelling</td>
<td></td>
</tr>
<tr>
<td><strong>Specific Job:</strong></td>
<td>Spelling and Typing Names of Office Equipment and Supplies -- List 1</td>
<td></td>
</tr>
<tr>
<td><strong>Objective:</strong></td>
<td>After studying the list of office equipment and supplies attached to this job sheet, you will type all 20 words correctly as your instructor dictates them. All typing errors must be corrected.</td>
<td></td>
</tr>
<tr>
<td><strong>NOTE:</strong></td>
<td>Any mispelled words must be typed correctly 25 times on a separate sheet of typing paper.</td>
<td></td>
</tr>
<tr>
<td><strong>Equipment:</strong></td>
<td>Typewriter</td>
<td>Eraser</td>
</tr>
<tr>
<td><strong>Procedure:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Steps</strong></td>
<td>Use the dictionary to find the meaning of any word that is new to you.</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Study the list of words until you feel confident that you can spell them correctly.</td>
<td>If your paper is folded correctly, you will not be able to see the correct spellings of the words.</td>
</tr>
<tr>
<td>2.</td>
<td>Fold the attached sheet in half and insert it in your typewriter.</td>
<td>If you do not hear a word, ask the instructor to repeat it.</td>
</tr>
<tr>
<td>3.</td>
<td>Ask your instructor to dictate the words to you.</td>
<td>Use your typing eraser to correct your mistakes.</td>
</tr>
<tr>
<td>4.</td>
<td>Type the word in the space provided.</td>
<td>If you find that you have missed a word, ask your instructor to repeat the list of words.</td>
</tr>
<tr>
<td>5.</td>
<td>Proofread the entire list of words.</td>
<td>Make sure your name is written on all of your papers.</td>
</tr>
<tr>
<td>6.</td>
<td>Remove your paper from the typewriter and give it to your instructor.</td>
<td></td>
</tr>
<tr>
<td><strong>Performance Evaluation:</strong></td>
<td>The instructor will check your job sheet. All words must be typed correctly.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Portland Public Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>J.S. File Code</td>
<td>VOCATIONAL VILLAGE</td>
</tr>
</tbody>
</table>

materials. As the student completes the first two or three job sheets in a unit, the student and teacher confer on whether the material is sufficiently interesting and demanding. This recurring process of choosing materials and completing them continues until the student has been awarded a competency certificate upon completion of a unit of work. In this way, the student receives job credits for what he completes. Students who merely spend time at Vocational Village accumulate no credit; credit is
Figure 3. Sample Job Sheet

Name ___________________________ J.S. 22 Advisor ______________

I.C.U. Areas: Sheet Metal, Math
Unit of Work: Sheet metal measurement and layout
Specific Job: Lay out a double hem of a given width
Objective: You will be able to lay out and form a double hem on a piece of material to the exact measurement.
Equipment: Piece of metal 3" x 6", scratch awl, steel ruler.

The double hem is used in place of a single hem for more strength.

Procedure:
A = allowance for a double hem and is equal to two widths of the hem. A = 2W
1. From a piece of metal 2" x 6" make a ½" hem along the 6" edge.
2. How much material is left after the hem is completed to the nearest 1/64th inch?

Performance Evaluation:

Instructor ___________________________ J.S. File Code ___________________________

Portland Public Schools VOCATIONAL VILLAGE

based on the completion of each progressive job sheet in a subject unit.

Presently, the program is developing interdisciplinary job sheets which integrate the teaching of traditional academic subjects into the teaching of vocational education. The coordinators of vocational subject units meet with instructors in other interdisciplinary job sheets.
disciplines to discuss the interrelationships between their curricula. For example, teachers in each vocational area meet with the English and reading teacher to identify the technical vocabulary words necessary for occupation in that area. These become the basis for sets of job sheets in English courses.

As job sheets are put into actual use, instructors may need to make revisions. Tasks may prove too difficult and it may be necessary to split a single job sheet into three or four. Interest expressed by a student may indicate the desirability of developing additional job sheets on particular subtasks. Using this type of feedback, instructors revise job sheets and create new ones.

THE PEOPLE AT VOCATIONAL VILLAGE

Currently, Vocational Village serves a total of 454 educationally disadvantaged students in its day, evening, and summer programs. Of this number, 269 students are considered handicapped and 185 disadvantaged.

The program serves high school dropouts ages 14 through 21 who have no other education alternatives because their life patterns may have included failure, chronic underachievement, introversion, delinquency, poor home environment, psychological disorders, physical handicaps, hostility toward authority and traditional education, insecurity, subcultural standards and unemployability, malnutrition, medical neglect, or overall poor hygiene practices. More than 90 percent of the students currently enrolled are in need of some health or welfare services. Approximately 85 percent of the students come from low income families. Sixty percent of the students are female and 40 percent are male; the student population is predominantly white.

Nearly 30 percent of the students and their families are on welfare or social security. The clear majority come from one parent families, yet a "parent" here is considered any adult who may be responsible for the child, including uncles, aunts, grandparents, or adult friends of the legal parents. A small percentage of the students lives alone, is married, or resides in groups with friends.

The original concept of Vocational Village was to provide career education for students who had dropped out of the traditional schools in the Portland Public School District. The program chose dropout students who exhibited high motivation and interest in obtaining the skills necessary to make them employable. They were encouraged to try the program, quit for a period if they wished, and reenter whenever they felt the program could help them. Most of the students had experienced difficulties finding a job without any suitable skills, and had as a consequence become highly motivated and committed to Vocational Village.

The school board of the Portland Public Schools has now initiated a policy of transferring students out of the public schools directly into the program. This has not only limited the
enrollment of the formal dropout population but has changed somewhat the type of students the program serves. Forcing a student out of high school and into the program, as the director points out, robs the student of the valuable experience of street life; of seeing how critical vocational skills are to becoming employable. In addition, a student transferred into the program brings with him the same hostilities he had toward the public school. The transfer student is less likely to commit himself to developing skills than the student who has voluntarily enrolled. The director is presently working with the Area III superintendent in an effort to reestablish voluntary entry into the program.

Vocational Village also serves many students who were sent to the program on the recommendation of penal institutions, the courts, or hospitals. Presently there are 75 students on the waiting list for the day program. Such students are usually admitted within 2 to 4 weeks of their application, depending on available space and the student's circumstances. No more than 2 percent of all students who apply are refused admission and those who are turned down have demonstrated during the initial interview that they lacked motivation, maturity, or the potential for positive change, or they lived outside the school district. While few students are refused admission, many who apply (and pay their registration fee) do not enroll and participate in the program. The reasons are varies: moving from the area, return to street life, imprisonment, employment, personal problems, and so forth. Some feel unsure or have second thoughts about returning to school.

Follow up procedures are currently being formalized. The work experience counselor makes out monthly reports about students' experiences and successes in their new job placements. This is usually done only on students who are in the work experience program (parttime work, parttime class attendance), not those who have formally left the program for permanent jobs. Presently, a survey is being conducted on all graduates since 1969 through a mail and telephone canvass. For the most part, however, follow up has been informal. Because Vocational Village tends to develop a sense of community among students and staff, students frequently report on their peers' progress to their teachers. Staff members often maintain informal contact with former students whether they were formally dismissed, voluntarily left, or graduated from the program.

The 29 staff positions listed below are fulltime unless otherwise indicated.

- Director
- *Testing Coordinator
- Sheet Metal and Welding Instructor (afternoon and evening)
- *Evening Office Occupations Instructor
- Office Occupations Instructor
*Evening Math and Science Instructor
*Evening School Secretary
Audio-Visual Coordinator
Home Economics Instructor
*Evening School English Instructor
Food Services Instructor
Marketing Instructor
*Evening Social Studies Instructor
*Work Experience Secretary
English Instructor
Industrial Mechanics Instructor
*Admissions and Evening Supervisor
Admissions and Human Relations Instructor
Health Occupations Instructor
Work Experience Coordinator
Industrial Mechanics Instructor
*Industrial Mechanics Instructor (afternoon and evening)
*Records Keeper
Math and Science Instructor
Social Studies Instructor
Air Conditioning Instructor
Reading and Math Instructor
*Bookkeeper
*Attendance Secretary

There are 17 fulltime professional and paraprofessional staff for a staff/student ratio of 1:25. The predominantly white staff is half male, half female.

Most staff members are recruited from local industry by word of mouth: they hear about the program from an associate. A small number came from the Portland public schools or the Portland job corps program. Although staff members are certified to teach, the program looks for people who have had experience in vocations. Most current staff have been with Vocational Village since its inception. The key element for hiring new staff is that they are able to complement the present staff, have vocational skills needed by the students, and are able to work in an environment with unusual pressures (discipline problems, individual student needs, etc.).

The program does not now recruit volunteers. Staff feel that the nature of the curriculum, the teaching approach, and the

*Most evening instructors are employed by the program on a halftime basis. New instructors gain experience working in the evening program before moving into the day program. Only fulltime staff members act as student advisors.
needs that teachers must fill demand at least a halftime commitment to the program.

Each new staff member is given an informal orientation by the Director to acquaint him or her with program procedures and policy. Vocational teacher training programs are offered through the district professional growth program for credit, and teachers at Vocational Village are encouraged to attend. The training program consists of seminars on the development of learning packets. Summer seminars are held at the Village under the director's leadership, using consultant instructors from Oregon State University and the state board of education. In addition, the local school district may require that staff members attend Portland Public School District inservice seminars, workshops, and courses in curriculum development offered at the local community college. Seminars on specific remediation and the expansion of the program's curriculum are being planned for the future.

The program also requires that staff members attend two staff meetings a week -- one to discuss program procedures, operations, and/or problems, and one to discuss specific priorities, needs, and to develop curriculum and organize committees. As part of the inservice program, the director, in consultation with specialists from the state board of education, specifies some of the behavioral objectives of the program and discusses them at staff meetings. Staff members share their approaches, ideas, and suggestions for developing the program and curriculum.

There is no formal parent program at Vocational Village, although a few parents serve on the Citizens' Advisory Committee. Staff feel that for the most part, the students' parents have not exhibited a concern for their children's progress. The program, however, recognizes the role of the parent as critical to the students' sense of accomplishment and self-worth. A plan to involve parents in the evening sessions is being developed. Such a parent program would give parents the opportunity to examine Vocational Village's operations and objectives and could begin to help them develop their own vocational skills and further their own job opportunities.

Vocational Village would, additionally, like to set up a group therapy session with students and parents. In many instances, the program has become the neutral ground for families, and often performs the role of mediator in family conflicts. The proposed group therapy session would bring parents, students, teachers, and interested community members together in attempting to define, isolate, and deal with their inability to understand each other's needs.

Because few of the parents respond to invitations to visit the program, each student's advisor/instructor attempts to contact the parent directly. The advisor works with the parent as often as possible and encourages him to take note of his child's progress and to encourage the student to continue through the program.
Vocational Village is attempting to encourage interested parents to act as liaison between the program and parents of students in the traditional schools. Parents could also play an important role in disseminating the program and eliciting much needed public support for an alternative system to traditional education.

**COMMUNITY COMMITMENT**

Vocational Village, like all schools in the Portland Public School District, is required to have a Citizens' Advisory Committee. Chosen by the director in consultation with his staff, the program's Citizens' Advisory Committee consists of prominent citizens in the district who provide a strong political force for the program. It includes professionals and parents of students in the program and has aroused considerable public support for the Vocational Village concept. The program also has a Career Advisory Committee composed of employers throughout the community who are interested in the program and who provide jobs for work experience students or program graduates. This committee plays an essential role in guiding the policy of the program, since these potential employers set requirements for employees and are able to read the labor market for new trends in skills demands.

Various community businesses have an agreement with Vocational Village which permits them to assemble merchandise exhibits in the program's store facility for educational and display purposes. The program is an advertising mechanism for businesses and an instructional device for students interested in production and marketing. These businesses have donated thousands of dollars' worth of supplies, scrap materials, and curriculum suggestions (including training packages for their own employees) to the program. Because the business sector has taken such an interest in the program, Vocational Village is able to ensure its students employment in a variety of vocations. Staff members promote liaison with the business community by speaking to clubs and touring businesses.

In June, 1969, a beauty school satellite program was established in collaboration with the University Beauty College, a private school, which trains Vocational Village students to be licensed beauticians. The success of this program has resulted in negotiations with several private industries to develop other satellite learning projects.

Vocational Village has the cooperation of more than 25 agencies and community services throughout the Portland area. Direct and referral services range from rehabilitation for mentally retarded students to a complete physical education program for students provided through Warner-Pacific College. Warner-Pacific, Oregon State University, and other school with training programs for vocational educators have entered into a formal intern service arrangement with Vocational Village. The college students fulfill part of their practice teaching requirement by
assisting staff members. The program has helped strengthen Vocational Village's credibility with the academic community and has brought valuable human resources into the program at no cost.

Several government agencies have also become involved in Village programs. Because of the handicaps of most students in the program, they automatically qualify for services from the Department of Vocational Rehabilitation (DVR). DVR provides further training for interested graduates of Vocational Village, and the services of two DVR counselors.

Although the program collects no hard data for evaluation purposes, it continuously assesses its objectives and achievements. The director meets with staff once a year to analyze the curriculum and revise and expand it as necessary. He also observes classes and makes recommendations about classroom procedures or content alterations. The project is still small enough to be able to conduct informal program assessments at staff meetings.
Vocational Village is subject to an annual evaluation by the state board of education and periodical evaluations from Area III and the Central District Evaluation Division. None of these evaluations is usually as comprehensive as the program’s own informal methodology. The Portland School Board’s Career Education Advisory Council has a committee of business and industrial leaders which surveys the current occupational offerings and makes recommendations for change. The present vocational offerings were established on the basis of past committee findings. The Mayor’s Manpower Division and the Governor’s Manpower Division also do periodic reviews of the program to include in their local and state governmental reports.

The program considers the number of competency awards, graduates, and work experience placements as excellent indicators that it is meeting its primary objective of helping former high school dropouts gain the necessary skills for entry into a productive and self-satisfying vocation. Every time a student masters a task to the level of competency (determined by the completion of all job sheets in a given curriculum unit), he receives a competency award. Since September, 1970, the number of students certified for entry level career competency completions has been:

<table>
<thead>
<tr>
<th>Field</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing</td>
<td>44</td>
</tr>
<tr>
<td>Office Occupations</td>
<td>115</td>
</tr>
<tr>
<td>Metals</td>
<td>28</td>
</tr>
<tr>
<td>Refrigeration</td>
<td>12</td>
</tr>
<tr>
<td>Industrial Mechanics</td>
<td>65</td>
</tr>
<tr>
<td>Food Occupations</td>
<td>11</td>
</tr>
<tr>
<td>Health Occupations</td>
<td>8</td>
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<tr>
<td>Air Conditioning</td>
<td>20</td>
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<tr>
<td>Heating</td>
<td>9</td>
</tr>
<tr>
<td>Cosmetology</td>
<td>7</td>
</tr>
<tr>
<td>Electricity</td>
<td>5</td>
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</tbody>
</table>

In addition, the number of program graduates is considered a strong indicator of program success over time. In 1969, 11 students graduated from Vocational Village with a high school diploma; in 1970 there were 71, in 1971 there were 83, and in 1972, 105. Students placed in jobs as a result of the work experience program in 1971-72 totaled 183.

Future plans include pre- and post-testing of all students to provide hard data for long line dossiers. The program also hopes to measure each student's progress while in the program and complete follow up data on the student for every 2 years he is in the vocation he has chosen.
Recommendations for Replication

Several factors should be kept in mind by those interested in replicating the CDC program.

- Above all, in order to replicate the program as it exists at CDC, it must be replicated as a whole. CDC staff stress that no one aspect of CDC such as the Mini Trips, can have its full impact except as part of CDC's total program.
- Programs should seek to establish some commonality in terms of functional level of students.
- It is necessary to find qualified vocational education instructors sympathetic to special needs students, and then to involve all staff in a common effort.
- Course content and approach must be appealing to students in order to spark their interest.
- Staff members must constantly evaluate their program's goals and operations. They must be responsive and eager to change when aspects of their program are not effective.

FOR FURTHER INFORMATION
For further information about the Career Development Center, contact:

Dr. Irving Goldberg, Principal
BOCES Career Development Center
100 Haskett Drive
Syosset, New York 11791
(516) 921-5570

Because the need for the Mobile Unit for Vocational Evaluation was based on the unique distribution of population in Baltimore County, the independent nature of the Board of Education in Baltimore County, and the existence of special education classes in most county high schools, there are several factors which one should consider before contemplating a similar type program. Mobile Unit staff recommend that there is a need to:

- Find evaluators and evaluator aides who are highly qualified people sensitive to current techniques in evaluation and to the individual needs of students with learning disabilities.
- Promote and explain the concept of vocational evaluation throughout the area—to parents, students, potential employers, and educators—prior to operation.
• Plan the construction of the van itself so that it is suitable for the area it will be operating in. Check moving regulations and space.
• Consider the necessity of providing a mobile facility before assuming that vocational evaluation is predicated on the van concept. Evaluation does not require mobility: any similar facility—mobile or stable—can serve equally well. Population distribution is the important factor here.

FOR FURTHER INFORMATION
For further information about the Mobile Unit concept, contact:
Ms. Edna T. Warwick
Mr. William T. Dixon
Board of Education of Baltimore County
6901 N. Charles Street
Towson, Maryland 21204
(301) 494-4221

MATERIALS AVAILABLE
The following materials are available upon request from the Mobile Unit for Vocational Evaluation:
Brochures
Equipment Lists
Project Final Report

SERVE administrators feel that the interagency cooperative concept can be replicated in other states, even those with different administrative and educational structures. Basically, the concept stresses a redefinition of roles and responsibilities within the framework of already existing legislation. What was required to establish SERVE was a concerted effort to iron out contradictions, gaps, and overlaps among the guidelines and mandates for each agency in order to resolve start up conflicts. Once the precise formula for funding and administrative responsibility had been conceptualized and accepted, the model functioned without recurrent problems as each new SERVE program was implemented locally.

The concept of a SERVE program located in a large area vocational high school need not be difficult to replicate. The
The purpose of the SERVE Center is to provide support and supplementary services to special needs students so they can succeed in the regular classroom setting. Replication is not contingent on a specific staffing pattern, the courses offered, or an elaborate and sophisticated vocational education facility. However, SERVE personnel stress the importance of:

- Establishing a cooperative working arrangement with regular vocational education teachers.
- Establishing specific procedures for identifying students who need special help and referring them to the support staff.
- Providing instructional materials geared to the students' reading level.
- Providing individualized tutoring and counseling as needed.

FOR FURTHER INFORMATION

For further information about SERVE, contact:

Charles F. Wrobel, Manager for Special Needs Programs
Special Intermediate School District 916
3300 Century Avenue North
White Bear Lake, Minnesota 55110
(612) 770-2351 Ext. 321

MATERIALS AVAILABLE

The following program materials are available upon request at the above address.

SERVE Work/Experience Narrative for Senior High School Programs for Handicapped — Disadvantaged. Cost: $2.50 for duplication, mailing and handling.

SERVE Center Narrative at # 916 on Vocational Education, Vocational Guidance and Counseling, Work Adjustment Training and Integration of Special Needs Students into Regular Vocational Education Programs. Cost: $2.00 for duplication, mailing and handling.

Project Worker has already been replicated by a few school districts in and outside of California. The Project staff emphasize the following general points for those considering such a model:

- Because the success of Project Worker is so dependent on teacher and parent attitudes toward vocational education the initial year of the program should focus solely on
planning and teacher preparation. Staff suggest that the program run teacher (and parent) workshops to deal with attitudes and feelings in order to promote understanding and support for the program's goals.

- The costs of Project Worker are shared by several sources. The teaching and administrative staff are already employed by the school district. The only expenses incurred directly by Project Worker, therefore, are for equipment and a work experience counselor. The joint funding arrangement between ESEA and VEA monies, which has helped to coordinate and consolidate state efforts, is considered by staff to be the most important element of the Project's administrative operations. It has helped broaden the scope, understanding, and support of the Project itself by the Department of Education and the Department of Vocational Rehabilitation.

- The program is moving away from the use of mock-ups because teachers have found them distracting and difficult to employ in the classroom. Staff feel that an ideal program would have a job center (a location used by several schools—in lieu of incorporating the program into every class. This would allow the mock-up equipment to be used by more students and would eliminate the problem of distraction in the classrooms.

Because videotapes are the heart of its curriculum, Project Worker has learned a great deal about production and training techniques:

- The television technical advisor has decided to field test draft versions of new tapes before making final prints; he has encountered various technical problems which could easily have been avoided with the use of draft runs.

- The equipment originally purchased was intended for film production in a mobile van. Many technical difficulties occurred due to motion while in transit, excessive temperature variations, voltage drop, and other related factors. Also, the bulky equipment and the large crew needed to handle it severely disrupted the normal operations of the businesses being filmed. The Project now has a permanent television studio and a new camera for onsite taping. Although more time consuming, it is possible to produce the tapes with only one camera and one videotape recorder (Project Worker uses three cameras).

- Originally the staff invested a great deal of energy in the production of overview tapes. However, they found that the students were generally familiar with the tasks involved in many jobs, and if they were not, they could visit the industry or view a commercial film quite easily. Therefore,
energy has been redirected at the skill application tapes. However, these have also changed in nature. During the first two years, these tapes trained students for specific jobs at specific places of business (i.e., how to be a cashier at a particular department store). These tapes have become more generalized now; they are no longer directed at specific businesses and they often focus on broader job area skills.

FOR FURTHER INFORMATION
For further information about Project Worker, contact:
Mr. Walter F. Retzlaff, Director
Exceptional Pupil Services
Fullerton Union High School District
211 West Commonwealth Avenue
Fullerton, California 92632
(714) 879-4451

MATERIALS AVAILABLE
The following materials are available from Project Worker upon request:
Brochure
Final Evaluation Report
Videotape Library Catalogue
Television tapes may be purchased at a nominal fee. An average 20 minute program would cost $2.20 if interested persons furnish the tape.

TVID staff offer the following guidelines to persons interested in setting up integrated programs for postsecondary deaf students:

- **Assess the need for such a program in the geographic area to be served.** TVID serves students from all areas of the United States. If the program were to limit its recruiting to a single state, staff feel they would not get the "critical mass" of students necessary for an effective program. That is, the student body should be large and varied enough so students have the opportunity to make choices when selecting friends and developing peer group identification. The incidence of hearing loss is so low that it is often not feasible to set up such a program to meet the needs of a single state, particularly in less populous states.

- **Consider the level of students to be served.** Will the proposed program serve only the top 10 percent of academically qualified deaf students or does it plan to serve
low underachieving deaf students? The implications of an integrated program must be investigated according to the kinds of students who will be served.

- **Match the kinds of students served with a suitable host facility.** Extreme care must be taken in selecting a host facility that has and practices training objectives appropriate to the needs of deaf students. A well-staffed, well-equipped facility is necessary, but care must also be taken to ensure that the facility’s training is not too advanced for the level of deaf students accepted.

- **Locate the program in an urban area.** An urban location generally offers more varied employment opportunities than a small town and also offers deaf students more socialization and independent living opportunities.

- **Recruit qualified staff.** Recruitment must often be conducted nationally to locate qualified staff with experience in communication with the deaf as well as vocational-educational and teaching certification and experience.

- **Develop a continuing funding base.** Federal funding should be explored, but often, these sources are tenuous and limited. It is crucial to have well-defined mechanisms for continuing funding.

**FOR FURTHER INFORMATION**

For further information about St. Paul’s Technical Vocational Program for Deaf Students, contact:

Mr. Roger Redden  
Program for Deaf Students  
Saint Paul Technical Vocational Institute  
235 Marshall Avenue  
St Paul, Minnesota 55102  
(612)227-9121

**MATERIALS AVAILABLE**

The following materials are available upon request and without cost from the Technical Vocational Institute:

- A variety of materials to prospective students, counselors, teachers, and parents. These information packets include, as a minimum, program brochure, tuition cost, costs for room and board, costs for tools, supplies and equipment, and all appropriate information required for referral.
Vocational Village

Vocational Village depends heavily on the ability of its staff to plan, experiment, and revise on a continuing basis. Individualized curriculum requires that each staff member be able to piece together what he knows about a vocation with the skills each student needs in order to develop competency—a formal, tedious, and precise process.

The director suggests that programs considering the Vocational Village model:

- Not assume that the type of program operated at Vocational Village is the panacea for all high school dropouts. The program is dependent on community resources, staff qualifications and commitment, public support, and the particular needs of students who find themselves disenchanted with formalized education.

- Be certain that defined behavioral objectives are actually meeting the needs of the students being served, and are not merely a response to the problems of an apparently unproductive population who are assumed to need vocational training. Each curriculum unit should be able to stand up to the questions, "Why are you teaching that?" and "How will it meet the needs of the students?"

- Get a positive commitment from the community, particularly the business sector, for support of the program. Vocational Education is absolutely dependent on the ability of the community to give graduates jobs.

- Document every aspect of the program's development, particularly when defining goals and objectives. Documentation is not only an effective tool in overall program evaluation but safeguards the program from moving too far away from its original purposes.

- Clearly define its role as a system of alternative education, so that it (a) does not begin to simply duplicate the traditional approach to vocational education in the high schools and so that it (b) preserves its own uniqueness as a special program outside the standard jurisdiction of public school education as such.

- Acquire a director whose abilities are balanced between career education and school administration. The director of a Vocational Village must be responsive to the business community and must respond to its employment needs before determining overall program policy as in a traditional school.

- Likewise, acquire a staff whose basic expertise is career education. The job sheet system requires that teachers
know what is expected in various occupations so that they can develop a curriculum which will help a student acquire job entry level skills. Because the approach is individualized, the teacher must be able to assist students on a one to one basis and accept their ability to achieve, no matter what the level.

FOR FURTHER INFORMATION

For further information about Vocational Village contact:

Ronald L. Thurston, Director
Vocational Village
5040 Milwaukie Blvd., S.E.
Portland, Oregon 97202
(503)234-6504

MATERIALS AVAILABLE

The following materials are available upon request from Vocational Village at no charge (include postage for return mailing):

Teacher Handbook (orientation)
Student Handbook (orientation)
Program Brochure
Two page statistical fact sheet
Interdisciplinary Curriculum Package (Job Sheets)
Development of a Plan to Improve the Personalized Instruction Program at Vocational Village
(An indepth research study prepared for the US Department of Education.)