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ABSTRACT

This review of operational vocational programs for handicapped students in Texas was conducted to: (1) ascertain areas of strength and areas which need support in order to make recommendations for future programming, and (2) develop proposal and self-evaluation guidelines. To gain necessary information, site visitations were made to 27 local school districts in Texas and to programs in 13 other states, where interviews were held with representatives from the disciplines of vocational education, special education, and vocational rehabilitation. Interviews were balanced between administrators, teachers, counselors, employers, interested citizens, Education Service Center administrators and professional staff, and Department of Education college professors. On the basis of interview data and a review of relevant research, recommendations were made for each level of program administration. These recommendations along with information secured from other states and descriptions of unusual programs and approaches are included in this report. A summary of the project activities is available as VT 019 712 and the guidelines for proposal evaluation and program self-evaluation are available as VT 019 713 and VT 019 714, respectively, in this issue. (SE)

A Review of Pilot Vocational Programs for the Handicapped in Texas

by
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Houston, Texas
1972

A REVIEW OF PILOT VOCATIONAL PROGRAMS FOR THE HANDICAPPED IN TEXAS

Submitted to

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by
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This study would not have been possible without the receptivity, graciousness and honesty of personnel from the state education agencies and the local school districts. Without exception, those visited gave their time and information unbegrudgingly, in spite of heavy work pressures from which my visit took them. The considerable traveling to schools throughout Texas and the other states has given me a renewed respect for educators, and the awesome problems they face. Certainly a major problem confronting educators is obtainment of the necessary support to make adequate vocational training available to handicapped students. One has only to spend limited time with special education students to see how desperately they need and want to feel they have something to offer and that they can be successful. Certainly, vocational education can offer concrete tasks which the special students can accomplish, and can develop and reinforce the needed success pattern. It is with these students in mind that this report has been written.

Further, my deep appreciation to Mr. Ray Barber, Director of Occupational Research and Development, Texas Education Agency, and to two members of his staff--Mrs. Janis Thomas and Mr. T. R. Jones--for their support, encouragement and unfailing assistance throughout the project; to Mr. A. H. Bartschmid and Mr. Don Fariss, Vocational Liaison staff to Special Education and Mental Health/Mental Retardation respectively, for their cheerful and continual assistance; and to Dr. Robert Montgomery and Mr. Don Partridge, Division of Special Education and Special Schools, Texas Education Agency for their assistance and support.

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Finally, my gratitude is extended to Dr. J. Earl Williams, Director of the Center for Human Resources, for creating and maintaining the free atmosphere to develop this project and for his uncanny ability to ask the "right" questions; to Mrs. Ethel Dumbauld, Office Supervisor of the Center, and her secretarial staff for deciphering, without complaint, hundreds of handwritten pages; and to Mrs. Jane Lerner, Assistant to the Director of the Center, for reviewing, coordinating and expediting the myriad details of developing these reports into printable form.

TABLE OF CONTENTS

INTRODUCTION

The Vocational Education Amendments of 1968 (PL 90-576) declared an overriding purpose of making high quality vocational education readily accessible to all. The Act identified categories of "all" and, among others, included set-aside monies of 10% to be funneled to vocational programs for the handicapped. Implicit within the Act is a shift to priority consideration of the "needs of the student and not the predetermined structure of a course or program."[1] This seemingly would enable changes within the vocational structure to accommodate "special needs" students.

With this redirection of emphasis in the Vocational Education Amendments of 1968, and the mandate of the national legislators by statement and earmarked money, how have the handicapped students fared in obtaining vocational services? The Texas Education Agency, Division of Occupational Research and Development, felt the necessity to review their operational vocational programs for handicapped students to enable development of priorities and redesigned criteria for funding new proposals to serve this group. To this end, the agency contracted with the Center for Human Resources, University of Houston, to undertake such a study. Considerable site visitations were made in Texas and thirteen other states, and numerous

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[1] Robert M. Tomlinson, "Implications and Reflections: The Vocational Education Amendments of 1968," in Contemporary Concepts in Vocational Education, ed. by Gordon F. Law (Washington, D. C.: American Vocational Association, 1971), p. 29.

discussions were held with knowledgeable people from the disciplines involved: vocational education, special education, and vocational rehabilitation. Interviews were balanced among administrators, teachers, and counselors as well as employers, interested citizens, ESC administrators and professional staff, and Department of Education college professors.

This study's conclusions are based on these visits and interviews conducted primarily by one professional staff person, as well as on extensive reading from literature reviews, published reports from other states, program materials from local school districts, materials from the Council for Exceptional Children and the First Yearbook of the American Vocational Association as well as other research materials. It is important here to state what the study's intent is and is not. The study is a broad overview of operating programs in Texas as seen by an "outsider" to ascertain areas of strength and areas which need more support in order to make recommendations for future programming, and to develop proposal guidelines and self-evaluation guidelines which reflect these findings. It is not an evaluation (of the success, or lack of) of Texas programs nor a comparison of Texas programs to those of other states.

It is recognized that a focus on vocational education for the handicapped (an infinitesimal part of the total educational scheme) cannot be completely separated from the total educational system in that it is obviously affected by those forces which affect all education, i.e., national, state and local structure and funding, public acceptance and

attitude, etc. Nevertheless, the intent of this report is to focus on one small segment of the educational system--vocational education for special education students. Before looking at the pilot programs operating in Texas, it would be well to put them into historical context. If a comparison were made of the pilot vocational programs to the regular vocational programs, the comparison would be discouraging. However, if the comparison is between what was available in vocational education for handicapped students prior to the inception of the pilot programs in September 1, 1969, and the current situation, the change is quite dramatic. It should be noted that even though the Vocational Education Act of 1963 (Purpose 4) provided vocational education "for persons who have academic, socio-economic, or other handicaps that prevent them from succeeding in the regular programs of vocational education," no programs were initiated in Texas under this Act for those with mental or physical handicaps. Few, if any, states responded to the 1963 Act with vocational programs for handicapped students, which is one reason the Amendments of 1968 added a Purpose (4B) specifically to enable this gap to be filled.

CHAPTER I

TEXAS STATE PLANNING AND ORGANIZATIONAL STRUCTURE FOR PILOT PROGRAMS

Texas, in initial statewide planning for vocational programs for the handicapped, utilized three levels:

Level 1 - The Commissioner's Coordinating Council - biweekly meetings attended by the Commissioner, the Deputy, Associate and Assistant Commissioners.

Level 2 - The Executive Planning Committee - alternate biweekly meetings attended by the 27 major division directors. Reports to Level 1.

Level 3 - Standing Committees and Special Task Forces - the relevant task force is the one for coordinating Vocational Education, Vocational Rehabilitation and Special Education - meets on call as needed - composed of two members from each of the three areas and one member each from Guidance and Counseling, Secondary Education, Funds Management and the Office of Planning. Reports to Level 2.

To develop the specific plan to present to the State Board of Education to serve the handicapped (to implement the 1968 Vocational Education Act Amendments), representatives from Texas Rehabilitation Commission, Department of Special Education and Special Schools and the Department of Occupational Education and Technology worked as a team.

The plan this team developed (which called for the set-aside--10%--monies to be used for pilot projects) was adopted by the State Board of Education on June 7, 1969, and notification of the plan and proposal guidelines to be followed for funding consideration was made to all school districts in the state with Special Education programs. Proposals for pilot programs received in response to the notification were reviewed by a committee of no less than five members composed of representatives from the Research Coordinating Unit, the Division of Special Education and Special Schools, the Texas Rehabilitation Commission, and others on an ad hoc basis. The committee then made recommendations to the Associate Commissioner for Occupational Education and Technology.

During 1969-70, the first year that funding was made available for pilot vocational programs for the handicapped, programs were approved in 11 Education Service Centers (ESC), 4 junior colleges, 10 state schools state hospitals (SS/SH) and 32 independent school districts (ISD).

In 1970-71, 41 new programs were approved (34 ISDs, 4 ESCs, 2 SS/SH and 1 junior college) and all first year programs were funded for a second year.

In 1971-72, 19 new programs were approved (14 ISDs, 2 ESCs*, and 3 SS/SH) and 2nd or 3rd year funding was given to the previously funded

*One of these newly approved ESC programs (Edinburg) did not become operational or expend funds during the 1971-72 school year. Therefore, it is not counted in total programs in operation.

programs, with the exception of one ISD. This brought the total programs in operation during 1971-72 to 115 (79 ISDs, 15 SS/SH, 16 ESCs and 5 junior colleges).

Apparently, all proposals which met the basic guidelines were approved for funding and because the demand did not exceed the money supply, no priorities were developed for use in funding (for instance, programs aimed at certain handicapped groups other than Educable Mental Retardates). At the state level, the Division of Occupational Research and Development (originally the RCU in the Department of Occupational Education and Technology) was given administrative responsibility for these pilot programs. While this responsibility was in addition to the many others this office carried, the programs were fortunate to have two vitally interested and concerned consultants from this office with whom to work. In addition, two vocational education liaison men were assigned--one to Mental Health/ Mental Retardation in June, 1971, and one to Special Education in September, 1970.

In July, 1972, the pilot programs operating in the independent school districts were transferred to operating status (partially under Minimum Foundation allocation) and the program responsibilities transferred to the respective regular program staffs in the Division of Public School Occupational Programs.

CHAPTER II

REVIEW OF TEXAS PROGRAMS

The conceptual design of vocational education for the handicapped includes a three-phase approach to training:

Phase I - Exploratory - pre-vocational activities to include vocational assessment techniques leading to an occupational diagnosis.

Phase II - Vocational Training Programs - vocational training in a shop or laboratory setting either especially designed for the handicapped or in a regular vocational program with modified curriculum.

Phase III - Job Placement, Evaluation and Follow-up.

As stated earlier, pilot program funding was awarded to four different educational units: local school districts, state schools/state hospitals, education service centers and junior colleges. Local School District programs are primarily Phase II (although some have Phase I components), the Education Service Centers have exclusively Phase I programs and the state schools/state hospitals have predominately Phase II programs--with a few Phase I components attached. Phase III is the responsibility of the Texas Rehabilitation Commission, either through its cooperative programs or through direct service by one of its counselors. Because of the basic differences among these educational units and the unique problems faced by each, this chapter will deal with each unit separately. Junior college

programs--none of the five programs were visited--will only be summarized.

Section 1

Local School Districts

As of September 1, 1971, there were 994 independent school districts in Texas (including 25 state schools or special schools). There were 528 special education fiscal agents (representing more than that number of school districts) and approximately 200 districts had cooperative program agreements with the Texas Rehabilitation Commission (TRC). In 1971-72, 79 independent school districts had pilot vocational programs for the handicapped (representing about 57% of the total "set-aside" expenditures, see Chart 1), serving approximately 2,500 students in the Phase II category.* With the exception of one school district (Dallas Independent School District) whose program is serving about 25 hearing impaired students, all district programs were serving predominately Educable Mentally Retarded (EMR) students (with a few districts including limited numbers of Trainable--TMR--and Minimal Brain Injured--MBI--students).

The predominant age of students in special vocational training in 1971-72 was 15 years; 64% of the students fall into the 14 to 16 age range, 15% in 11 to 13 range and 21% in the 17-21 range (see Chart 2). Unfortunately, there is no breakdown in the number of students who are in their first,

*77 districts are offering vocational training; two (2) districts have vocational orientation (Phase I) units only.

second, or possibly third year of training. It is important to know, for instance, whether the 515 sixteen years olds involved in the 1971-72 training programs are in their first year of training(and, thereby, likely to be 18 when they complete their training) or are primarily third year students who have been in junior high level training and are now, theoretically, ready for job placement.

There are 16 training areas represented throughout the districts, the majority of which are cluster skill training areas. The largest single cluster area (offered in 43 school districts) is Home and Community Service enrolling 742 predominately female students. The second largest cluster area (offered in 32 school districts) is General Construction Trades serving 630 predominately male students. All programs are separate from regular vocational education, developed solely for handicapped* students, with only one exception (and that not totally an exception due to the fact that although special education students were placed in two regular vocational classes, with regular students, separate teacher aides were provided which seemed, at least in one class, to have the effect of separating the two groups).

Site visits were made to 27 local school districts in Texas, 25 of which had vocational training (Phase II) programs and two of which had vocational orientation (Phase I) only. They were chosen somewhat randomly;

*Hereafter, in this section, the predominate handicapping condition, EMR, will be used in place of the word "handicapped."

however, all major urban areas were included (Dallas, Fort Worth, Houston--2 districts, San Antonio--5 districts, El Paso, Brownsville and Corpus Christi--2 districts). Suburban schools were also visited (Arlington, Aldine, Galena Park, Pasadena, and Hurst-Euless-Bedford) as well as a representative geographical cross section of the state (Abilene, Alvin, Brenham, Bryan, Del Valle, Denton, LaMarque, San Marcos, Rio Grande Rehabilitation District--Edinburg and Harlingen).

Areas within the school programs to be covered include:

1. Overall Program Value
2. Proposal Planning Basis
3. Day to Day Program Responsibility
4. Teachers and Teacher Aides
5. Location of Vocational Classes
6. Location of Special Education Classes
7. Selection and Scheduling of Students
8. Vocational Curriculum
9. Equipment
10. Related Special Education
11. Phase II Relationship to Phase I and Phase III Components
12. Unusual Programs

Overall Program Value

There is no hard data available which can be used to substantiate success in terms of job placement of special education students who have completed these vocational pilot programs in the independent school districts.* This could be attributed to the fact that the majority of

*OE Form 3139 (Placement of Program Completions on Vocational Education Programs) dated 1/31/72 for FY ending 6/30/71, shows 0 placements of handicapped in Texas.

students involved in the programs have been and are younger than placement age, and many of them may be in work-experience phases in the cooperative school-Texas Rehabilitation Commission program. However, there appears to be enough subjective data to indicate the greatest values of the programs to date have been:

1. Special education students participating in these pilot vocational programs have vastly improved attitudes toward school as observed by special education and vocational education teachers, parents and rehabilitation counselors. Also, many of the involved educators feel these programs have prevented a significant number of special education students from dropping out of school, as well as having attracted some students (who badly needed to be in the special education program, but had resisted) into the special programs. Several districts mentioned special education students, previously out of the system, who were re-enrolled in school (at their own request) due to their interest in the special vocational programs.
2. Many special educators as well as vocational educators have modified their thinking regarding the vocational potential of special education students. Through observation of the students' performance and interest in a vocational class setting, each discipline has seen that many special education students have vocational abilities they neither recognized nor thought possible before.

These are program strengths which should not be underestimated and provide a strong base on which even better programming can be built.

Proposal Planning Basis - How Were Vocational Training Areas Selected?

This question was asked of administrators during visitations of 25 schools with training programs. Generally, the answers indicated areas were proposed as a result of employment opportunities in the local areas determined from the Employment Service, from rehabilitation counselors, and from their own employment surveys of their areas (two districts). Many said it was necessary to choose one area for boys and one for girls, and General Construction Trades (GCT) and/or Building Maintenance and Repair (BM&R) for the boys and Home and Community Services (H&CS) for girls were "natural" choices. It was admitted that space availability in the district considerably influenced choice of training areas.

Day to Day Program Responsibility

This designation does not imply the administrative responsibility for programs (which is clearly defined as vocational) but rather which division seems to have assumed the closest day-to-day working contact with the special programs. The breakdown which follows was determined on a combination of three factors:

1. to whom did the superintendent refer site visitor (12 referred directly to vocational directors, 11 referred directly to special education or special needs directors, and 2 had such small programs the visitor was referred to counselors),

2. who had the most consistently frequent contact with the vocational classes, and

3. observation of the visitor.

Closest working contact with program	Number of schools
Vocational Director	8
Special Education	9
Joint-Vocational and Special Education	5
Administrator	3

The significance seems to be potential dilution of program direction if there is not a strong vocational interest and monitoring.

Teachers and Teacher Aides

Teachers - The majority of teachers met and observed in these special vocational classes are extraordinarily patient and concerned for the students in their classes. Anyone who has not had extended daily contact with retardates may not realize the special talent and personality necessary to teach through constant repetition, not only repeating hour to hour, but day to day, week to week, month to month. All vocational teachers in these pilot programs had to be certified by the Texas Education Agency as vocational teachers. Some of these special teachers have special education certification in addition to vocational certification. Others have had previous experience with retarded persons though their own varied backgrounds. It is to the credit of those responsible for hiring these teachers that consideration was given to the individual's sensitivity as well as to his vocational competency, and several administrators said they had interviewed

numerous applicants before finding the "special" person.

Teacher Aides - Faced with the severe salary limitation ($300 per month is the maximum allowed by TEA for reinbursed payment) imposed on the aide's job (Aide I), the persons employed in this capacity are amazingly competent and interested people. School districts can supplement this salary with local funds to raise the base, and many have had to do so. Many of the districts which have not added local money to supplement the $300 monthly limit have not been able to hire male teacher aides (for those vocational areas dealing with construction and maintenance), and some have hired females, admittedly with limited knowledge or experience in these fields, but a willingness to learn. Several administrators expressed concern that teacher aides were not being utilized in the way they were intended (teachers would let them take full charge of a class), and in-service training was going to focus on proper utilization of an aide.

Location of Vocational Classes

Those programs visited serving students predominately 16 years and older (14 districts) had classroom space located at campuses ranging from vocational-technical high schools to elementary schools (two major urban districts) as follows:

Vocational technical high school	2
Regular high school	4
Junior high or middle school	2
Special education campus	3

Off-campus site	1
Elementary	2

Those training programs serving students predominately under 16 years (11 districts)had locations as follows:

Regular high school	1
Junior high or middle school	7
Intermediate school (6-7 grades)	1
Special education campus	2

The campus location of the special classes seemed more important to the older participating students (16 years and older). When visiting the elementary campus on which the program of one of the largest school districts in the state is located, the teachers stated the location was the greatest weakness of the program and, they felt, directly accountable for the program's under enrollment experienced since it began. In the other urban district's program located on an elementary campus, the teachers also felt their site location was the greatest program weakness, but it had apparently not appreciably affected their enrollment figures.

Location of Special Education Classes

On same campus as vocational classes	19
On different campus than vocational classes	4
Mixed (district had vocational classes on two campuses, one group had to be transported; district had part of classes on same campus, the rest on another)	2

It is gratifying to see that, in spite of the space problems which

every school district experiences to one degree or another, by far the majority of related classes are being held on the same campus as the vocational classes. The advantages of this are obvious, the disadvantages equally obvious.

Selection and Scheduling of Students

Selection of Students - In practice, it seems that most special education students, recommended by the special education division, who are in the age group which the district has contracted to serve, are placed into the appropriate special vocational class determined by sex differentiation; i.e., girls to H&CS, boys to BM&R, GCT, or similar type training. In the majority of programs visited, it was clearly established that special education determined which of their students were to be placed in the vocational classes, and the vocational personnel were not part of the decision-making process. Many vocational directors told the visitor they were operating the vocational programs for special education and that the selection of students was their (special education's) prerogative.

A look at the chart below shows that 87% or 66 of the 77 school districts in Texas offering vocational programs have either one vocational area only (primarily male oriented) or two vocational areas (one primarily for males, the other for females).

Vocational Areas Available in Districts

# districts with one voc. unit only (for combined male and female	# districts with one voc. unit only (males)	# districts with one voc. unit only (females)	# districts with two voc. units (1M-1F)
4	18	5	38

# districts with two voc. units (both male)	# districts with more than two units	Total
2	10	77

With such limited vocational areas available, the student obviously has little or no choice regarding the general type of training he can obtain. While a choice is virtually nonexistent, it must be remembered that most of the vocational areas being offered are in "clusters." Therefore, the girl in H&CS can be exposed to training in health occupations, child care, homemaking, basic sewing, domestic chores, and cooking; while the boy in BM&R can be exposed to floor maintenance, electrical wiring, simple construction, plumbing, housekeeping, and outdoor maintenance (lawn and landscaping). The depth of skill taught, and the variety of skills within a cluster, varies from class to class and teacher to teacher, and seems to be most dependent on the skill and knowledge of the teacher. (See next page--Vocational Curriculum).

In districts visited offering more than two units (Bryan, Corpus Christi, El Paso, Fort Worth, Harlandale, Houston and Rio Grande), the student is often given a choice among the vocational offerings through informal "trying out" periods in different classes. This system seems

more a result of the teachers recognizing an opportunity to broaden the student's frame of reference (and letting the vocational choice be made by the student based on his experiences) than of administrative policy.

Scheduling of Students - The majority of programs visited had students scheduled into daily, two-hour time blocks for their vocational training. The vocational teachers worked with two groups of special students (one group in the morning time block and another group during the afternoon), with the average ratio being maintained at five students to one teacher. Teachers in these programs felt this should be the maximum time for special students to spend in vocational classes.

Several programs visited had scheduled three-hour time blocks for the laboratory training (the scheduling is the option of each school district). The teachers in these programs generally felt that three hours was too long in a vocational setting for the first year students (particularly the younger group of 14 year olds). The teachers also suggested that teaching two, three-hour laboratories did not leave them sufficient time to plan their course work or to have conferences with the special education teachers working with the same students.

Vocational Curriculum

Curricula being used in these special vocational programs vary widely in developmental stages. Only one district visited had completed (and printed) a curriculum. Teachers in the other districts said they "were developing curricula as they went along," and, without exception,

teachers were eager to know what their counterparts in other special programs throughout the state were doing and what materials they were using. Most teachers seemed to have specific skill blocks in mind or written down, and most of them had daily lesson plans and individual student progress reports in one form or another. Fewer districts were utilizing field trips as an integral part of their vocational teaching than those who were not. All the vocational teachers felt field trips would be excellent teaching tools, but most of them cited transportation problems as the barrier to their use.

As a general observation, it did not seem that many of the programs were using employer input (either formally through an advisory committee or informally), although some of the teachers were using their community contacts with employers as resources.

Another generalization is the apparent confusion the teachers have as to their focus of training--some feeling they should be doing in-depth skill training to prepare their students to go directly into employment; others feeling they can only expose the students to cursory skills and that actual skill training will be obtained through work experience.

Equipment

In general, the classes have adequate modern equipment, particularly in the boys' units, with wide representation of power tools. In spite of considerable reservations regarding mixing power tools and retardates (from special education and vocational education people) the safety record

has been quite extraordinary, with only a few minor accidents being mentioned.

Five of the districts visited had Food Service training, one of them using a well-equipped kitchen, one with limited commercial equipment and three with only home kitchen equipment. The State Education Agency did not require local districts to use state authorized equipment lists (in fact, no equipment lists have been developed for use in these special pilot programs) when purchasing for the new programs. Personnel from several districts told the observer that they "weren't allowed" to purchase the proper equipment, but the restriction apparently came from their own administration rather than from the State Agency. The state guidelines indicated that it was felt a program unit could be well equipped for $5,000; however, if a school district's instructional plan justified equipment expenditures in excess of this amount, permission was usually given to expend the funds requested for equipment.

Related Special Education - Is It Related to the Vocational Training?

This is one of the most critical and most sensitive areas in the local districts' pilot vocational programs.

Consistently, when asking this question of Special Education teachers and administrators, the answer was "yes." Equally consistently, vocational administrators, teachers and many Vocational Adjustment Coordinators (VAC) answered "not enough." This dichotomy seems directly accountable to the communication gap evident between the two groups with each feeling the other does not understand. At best this observer can isolate the difference

in curriculum approach; special education tends to classify "related" education as "practical" education relating to daily living skills, while vocational education classifies it more precisely as relating specifically to the vocational skills being taught.* The latter approach obviously requires considerable knowledge of several vocational areas, as the academic teacher usually has students from as many vocational classes as the district is offering. The problem for the academic teacher is compounded by the "cluster" approach mentioned earlier, as this involves knowledge of five or six areas in any given cluster. The majority of special education teachers do not have this knowledge and many realize this, but a workable vehicle has not been created which would allow for the needed practical input from their vocational counterparts. The special education teacher's frustration is shared by the special vocational teacher, who feels his time should be spent in skill training as opposed to teaching the students basic remediation and the necessary acceptance of basic responsibility which are the foundations of vocational education. One concerned vocational teacher lamented "It took me nearly six months to get my first year students to the stage where I could begin teaching--the students were used to being waited on, were demanding, and had no self-discipline." She went on to say that after both she and her class survived

*Is it significant that TEA Bulletin 711 (Administrative Guide and Handbook for Special Education) p. 33 states "The vocational education program for the handicapped should be closely correlated with the special education curriculum" rather than starting it in the reverse order?

those difficult days the students were able to learn skills, had pride in their accomplishments, and she had few complaints regarding their attitudes. This observation was echoed by many vocational teachers visited and indicates a need to look at the preparation of the special education students for entry into vocational classes. It also seems to substantiate the observation made in the report of the President's Committee on Mental Retardation (1969), which stated one of the reasons many retarded people "arrive at adulthood unprepared for job or daily living is that many educators look at what a retarded child isn't, not at what he is. The resulting curricula, developed with the retarded child's deficiencies rather than his abilities in mind, merely simplify and water down the course of instruction given normal children. Such programs require achievement in the academic areas where the retarded child is weaker and give little or no encouragement to the pragmatic skill areas in which he can accomplish something. Moreover--compounding the error to an incalculable degree--the school program for a retarded young person often takes no account of his age, offering the same content and approach when he is 16 as he was 6."[1] In a more recent publication, Dr. Brian McCann (a former Texan) quotes this same passage and adds, "The unfortunate lack of progress in this area is underscored by a recent survey which suggests

[1] Toward Progress: The Story of A Decade, Report of the President's Committee on Mental Retardation (Washington, D. C.: Government Printing Office, 1969), p. 18.

little innovation in curriculum development for the retarded, with the possible exception of several university based experimental programs."[2] This point is well made by a VAC from a large Texas school district who says that some of the retarded students in this program "have been pampered by parents, some teachers, and other people involved so that they have not been made to accept responsibility that is so necessary to a 'working environment.'"[3] The Texas Education Agency's Special Education publications outline well planned guides to curriculum planning, among other points stating that emphasis should be on vocational training rather than on academic instruction, particularly at the high school level. The difficulty seems to be the ways in which the intent of the curriculum guide is interpreted by local directors of special education and, more critically, by the special education teachers. VAC and TRC counselors have also questioned the preparation of students when 16 year olds have been referred to the co-op program unable to read at the first grade level or to make change. It is felt that the school must accept at least some responsibility for poor academic development, as well as minimal personal and social development.

Recently, a questionnaire to survey dropouts in special education was

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[2]Dr. Brian McCann, "Educating the Mentally Retarded: A Time for Change," Compact, August, 1971, p. 33.

[3]Quoted from questionnaire answers cited on next page.

sent to 100 special education departments throughout the state at the request of the Texas Legislative Study Committee concerned with Programs for the Handicapped. The last question was open-ended and asked, "What recommendations for changes do you have which would improve the education of the handicapped in your school district?" The questionnaire was directed to 50 VACs and 50 Special Education Directors. Eighty-six districts responded and the compilation of answers was completed in early June, 1972. The question cited above was answered by 68 persons and there was great similarity in the responses from across the state.

"In spite of state guidelines, our local program places less emphasis on vocational training and more on academic instruction at junior high and high school levels, thus causing special education students to lose interest in school." "Improve the curriculum offering in the special education classes--make it more vocationally oriented." "A more challenging and competitive situation might serve to better stimulate the students." "More individualized instruction." "Coordination of courses from class level to class level." "Modifying curriculum to meet individual needs." "More individualization of instruction." "We need a more rigid guide to adhere to in trying to get our students to the level of being more socially and vocationally acceptable. Many times guidelines set up in the Special Education Curriculum Guide have been abused to fit the need." "Total individualized instruction...and more meaningful curriculum." "Too many teachers are trying to offer watered-down academic curriculum instead of

training students to work with their hands..." "The academic program should be closely correlated with the vocational areas."

This section is not meant to imply the barriers to vocational education faced by special education students are solely perpetuated by the Special Education system. The above comments are indicative of the concern of special educators themselves. The barriers created by vocational educators are equally identifiable and will be explored in Chapter III.

Phase II Relationship to Phase I and Phase III Components

Relationship to Phase I - A local school district could have Phase I services (vocational orientation and/or vocational evaluation) from any of these sources:

1. The regional Education Service Center,
2. A self-contained orientation unit (funded through pilot money), or
3. The school's own resources.

Thirteen of the schools visited with Phase II components* were in regions where the Education Service Center did not have an operating Phase I contract (Houston, San Antonio, Edinburg and El Paso**). Of these, five

*Aldine, Galena Park, LaMarque, Pasadena, North Forest, Houston, Harlandale, El Paso, Rio Grande, Brownsville, Southside, Northeast San Antonio, and Northside.

**The El Paso ESC was funded under pilot money to expand their Project VIEW for use with handicapped students.

had their own vocational (or occupational) orientation units (Aldine, Houston, Rio Grande, Harlandale and Northeast San Antonio). After the first pilot program year (1969-70), the Texas Education Agency funded Phase I program components in local school districts only to the large, metropolitan area school districts where there was the capacity for the Phase I person to work in more than one or two schools. The other twelve schools were located in regions where the Education Service Center had an operating Phase I program and utilized ESC staff in varying degrees for vocational orientation for students and teachers, as sources of vocational materials for special education teachers and for vocational assessment (evaluation) of individual students.

It is difficult to establish a direct cause and effect relationship between Phases I and II as most of the programs in each component were developed simultaneously (with different groups of students in each). Because of this, the observer cannot generalize the effect participating in a Phase I activity had on a student's participation in a Phase II program, or if, in fact, students in Phase II programs had participated in any Phase I services.

The relationship between the Education Service Centers' Phase I programs and local districts' Phase II programs is explored in greater depth in Section 2 of this chapter.

Relationship to Phase III - As mentioned earlier, Phase III responsibility is given to the Texas Rehabilitation Commission and can be

accomplished in the following ways:

1. If a student is in a junior high level Phase II program, he would be "graduated" to the cooperative school program (between the school and the Rehabilitation Commission--explained below) for supervised job experience, and placement.

2. If the student is in a senior high level Phase II program, he would probably remain in the training program for two or three years until his graduation from high school, and the Texas Rehabilitation Commission Counselor assigned to the community would work with him for permanent job placement.

Cooperative School-Work Program - In 1962, Texas was among the first states to develop an active cooperative school-work program between the Division of Special Education and the Division of Vocational Rehabilitation (both within TEA). The third prong in the cooperative program is the local school district, who also signs the agreement. When the Division of Vocational Rehabilitation was dissolved and replaced by a State Commission for Vocational Rehabilitation (Texas Rehabilitation Commission) in September, 1969, the cooperative agreement continued without appreciable change. Predictably, planning and coordination became more complex as communication between separate state governmental units (in this case, Texas Education Agency and Texas Rehabilitation Commission) is obviously more difficult than communication between divisions under a single commissioner (the Commissioner of Education).

The positive value of this cooperative program approach over the past ten years has been immeasurable, as it filled a total gap in vocational

exposure and work experience for special education students of high school age. To appreciate the gap which existed, one must keep in mind that students with "special education" labels had generally been excluded from the regular vocational programs; consequently received little, if any, realistic job preparation prior to leaving the school system. The cooperative school-work program provides special education students (16 and older) a sequential basis for a vocationally oriented program leading to vocational proficiencies through a program of functional developmental experiences. While its limitations (no vocational skill training) are recognized by the teachers, counselors and administrators involved in the program, it still seems the most pragmatic approach to, at least partially, meeting the vocational needs of the special education student within the realm of the alternatives available to this group.

In 1971-72, approximately 200 school districts in the state had cooperative agreements operating. All districts with cooperative programs have Vocational Adjustment Coordinator (VAC) staff (paid through special education funds) in proportion to the size of the special education population being served. Districts without cooperative programs (even if they have special education departments) do not have VAC staff members. There is an intricate relationship between the VAC staff and the Texas Rehabilitation Commission (TRC) counselors and a summary of responsibilities of each may prove helpful.

In Texas Education Agency Bulletin #711, the structure of the VAC and

TRC counselor's jobs are as follows (quoted in total):

Vocational Adjustment Coordinator (VAC)	Texas Rehabilitation Commission (TRC)
•spends at least one hour to a maximum of one-half day in classroom	•a staff counselor assigned to work cooperatively with the VAC and his students
•serves as a regular member of the faculty as well as a member of the rehabilitation team	•a designated day by the counselor for counseling and guidance services
•has the services of the vocational rehabilitation counselor	•training fee, tools and equipment, if required (paid for)
•secures off-campus training stations, supervises and counsels with students in training at least one day a week	•psychological services when not available through public schools
	•psychiatric evaluations, if needed
	•medical evaluation and physical restoration services if not provided through other sources
	•parent counseling and guidance by the vocational rehabilitation counselor

Responsibilities are not quite so clear in the closing paragraph of Excerpts from Bulletin #711-Department of Special Education and Special Schools; TEA:

> Before a student is placed in the Cooperative Program, the VAC and the RC will observe the student, review his records and counsel with his teacher and other school personnel. The VAC and RC will also visit the parent and explain the full program, its value to the parent's child, the parents themselves and the community.

Delineation of responsibilities is more specific in the Texas Rehabilitation Commission's Plan for Rehabilitation of Handicapped Students Through

the Cooperative Program Between the Division of Special Education of the Texas Education Agency, the Texas Rehabilitation Commission and the Special Education Programs of the Independent School District of Texas (Revised March, 1971). The following is a partial listing of Duties of Key Personnel (Pages 10-12):

VAC (He will function as a regular rehabilitation staff member as well as a special education classroom teacher).

- administer vocational rehabilitation services under the direction and in cooperation with the RC assigned to the local school district
- be responsible for securing job training stations and supervision of on-job-training under the direction of the RC
- act as consultant to the RC in all instances concerning clients
- parent conferences with the RC

RC (A Rehabilitation Counselor will be assigned to specific schools to supervise rehabilitation program operations)

- initiate and conduct joint conferences with the VAC and school staff in screening applicants and providing services
- approve all job training. He shall evaluate training facilities, make training arrangements and agreements, advise with the trainer and VAC when indicated
- approve all expenditures for client services
- approve all individual rehabilitation plans for accepted clients
- supervise the VACs work with rehabilitation clients

It can quickly be seen in scanning the duties of the VAC and RC from

the perspective of both special education and the rehabilitation commission that there is a potential for confusion of priority responsibility from the VACs point of view--is he to be more responsive to special education or to the rehabilitation commission?

The observer found this a personal confusion in visiting with VACs and RCs and did not have a clear picture of this dual responsibility until the applicable guidelines quoted earlier were read and re-read.

There is certainly confusion at the local level regarding responsibilities of each (Special Education and Vocational Rehabilitation), and evident communication difficulties at three levels: between the two groups at state level, from the state level of each to their local counterparts, and at local levels. Two of the major program concerns identified are:

1. Responsibility for (operational) program monitoring--is this the local district's; the local Office of Rehabilitation; or a joint responsibility?

2. Evaluation of program effectiveness; who is responsible for follow-up of students after they leave the school system?

There are additional, perhaps equally important, questions being raised at local levels, such as: What type of state planning is being done by TRC regarding the potential expansion of the cooperative programs (estimated to double the present numbers of programs) as Plan A becomes operational throughout the state? Has the TRC clearly defined the role of the rehabilitation counselor with the cooperative program? Is he a counselor or coordinator of services; is he to be an effective change agent within the

schools? Is rehabilitation money being spent in the cooperative program in relation to the amount of money being generated? These are questions which must be resolved; first, by each discipline and, secondly, through a "meeting of the minds" with both and combined dissemination of clearly defined positions and guidelines.

The cooperative school-work program has not and does not involve vocational education in the context of specific occupational training, but rather depends on the work-experience aspects of the program to provide the special education student with basic work skills. When the pilot vocational programs were first instigated at the state, the original intent was to fund Phase II programs only to school districts who had cooperative programs in operation. It was quickly determined that rather than requiring a cooperative program prior to instigation of a Phase II program, that Phase II funding would encourage local districts to become involved with the cooperative program. It was felt to be more important that both a Phase II program and a cooperative program were operational within a school district than which of the two was instigated first. In the past three school years (September, 1969, through June, 1972), 26 new cooperative agreements have been signed by local districts with Phase II programs, certainly an additional value the pilot programs have contributed to Texas schools. Phase II programs funded for students under 16 required the district to develop a cooperative agreement which would be operational in time for referring the students upon completion of the special vocational programs.

It is not known by the observer whether this requirement was "understood" or contractually specified.

Of the 77 school districts operating special Phase II vocational programs, 65 have cooperative agreements in effect. The majority of the 12 school districts without cooperative agreements are districts which were newly funded (1971-72) with pilot vocational programs. There is no system presently in use to follow-up on districts with Phase II programs funded with the intent that they would instigate a cooperative agreement--a follow-up to insure that they are, indeed, making the effort to do so. A simple procedure could be devised which would pinpoint responsibility for this follow-up and would designate the method to funnel the information from the vocational people to the special education and vocational rehabilitation personnel.

It was generally felt, at the state level, that if the Phase II program was to work predominately with students of high school age (16 up), the presence (or absence) of a cooperative program was not as critical, since most of the students would remain in the vocational program until they graduated and would then be placed in jobs through the efforts of the rehabilitation counselor in the community. This concept was not clear at the local level in the minds of the vocational teachers in the pilot programs working with older students, particularly in districts where a cooperative agreement was in effect, with corresponding VAC staff. Many of the teachers in these situations voiced concern that the VACs were not

working with the students in their special vocational classes. However, several high school programs visited indicated an excellent relationship and frequent vocational-teacher contact with the VACs in these schools. The amount of involvement of a VAC with a pilot vocational program is undoubtedly influenced by several factors:

1. their teaching load (in some cases, VACs were teaching longer than the one half day maximum), and
2. the number of special education students (not involved with the vocational program) with whom they are working and the severity of problems of students on their caseloads.

The Texas Rehabilitation Commission counselor had little, if any, direct contact with vocational teachers, with the exception of the school district visited in which the rehabilitation counselor was officed with the other school personnel (Stinson School, Harlandale District). In this case, the relationship was predictably closer, with an excellent cooperative effort observed. The statewide records of Texas Rehabilitation Commission indicate that 1,794 successful closures (placements) were made for the year ending June 30, 1972, from the 200 Cooperative School Programs throughout the state. It is not known how many of these "successful" students had been involved in the Phase II program.

Unusual Programs

North Forest Independent School District (Houston), Smiley High School - This program is atypical of other pilot VEH programs in Texas in that it was designed and operated to integrate EMR students into

regular vocational programs in the high school. Special students are integrated into two vocational areas: Printing Trades, which just completed its third program year, and Horticulture Related, which completed its second program year. The regular vocational teachers were involved actively in the planning process. The program shows evidence of a close planning and operating relationship between vocational education and special education, and both directors work together in program monitoring and decision making.

Prior to the enrollment of the EMR students, the vocational director met with the regular students in the printing and horticulture classes and, after explaining the plans to enroll EMR students, requested their acceptance and assistance in "making this experiment work." The teacher aide in the Printing Trade class is a recent graduate of that same class and works with special and regular students interchangeably as does the teacher. The regular students in the printing class have been receptive to the special students and many have actively helped them in the learning process. Special students in the Horticulture Related class have not been as totally integrated with regular students as were the students in the printing class. The teacher aide works with the EMR students and the regular teacher with regular students. Both teacher aides spent a minimum of a week of orientation with special education classes prior to working with the special students in the vocational classes. There is a continued working relationship maintained between the aides and the special education

teachers, often with the aide and special education teacher together taking students on field trips.

Harlandale Independent School District (San Antonio), Stinson School - The pilot vocational program is located at this special school and has courses operating primarily for 16 year old and older students in Apparel Service, Bricklaying, Food Service and House Painting. Also included in the pilot program are two vocational orientation people, working with 14 to 16 year olds. Stinson School was opened in 1963 and is a special district school solely for Special Education students, with present enrollment about 200 students. All services are available on this campus: academic classes, vocational orientation classes, vocational classes, VAC staff and a TRC counselor. The vocational courses in Bricklaying and House Painting were developed in recognition of both the need for trained people in these fields and the fact that many of the fathers of children in Stinson School were employed or self-employed in these fields, thereby making employment readily accessible to students completing the courses. The principal is administratively responsible for all activities on campus, and coordination as well as a team effort is evidenced because of the close proximity of the services and the clear supervisory line.

Abilene Independent School District, Cooper High School - The VEH program is housed in excellent facilities at one of the district's two high schools. Two vocational cluster areas are offered, Home and Community

Service and General Construction Trades, and all participating students are 16 or older. The academic classrooms are adjacent to the vocational classrooms, and for this reason communication between the teachers is informal and frequent. The program is now strongly endorsed, supported and controlled by the vocational administration; however, the program was first proposed by the Special Education administration. The EMR students have considerable pride in attending school at Cooper, and the prestige of the location of this special vocational program is a motivating factor for younger special education students.

Section 2

Education Service Centers (ESC)

As mentioned at the beginning of this chapter, Texas' conceptual design for vocational education of the handicapped is a three phase approach with Phase I as exploratory and diagnostic (including vocational evaluation). The ESCs role in pilot Vocational Education for Handicapped (VEH) programs has been entirely focused on this phase, with 11 of the 20 regional ESCs in Texas funded with Phase I contracts in 1969-70 and four additional ESCs funded and the 11 first year programs funded in 1970-71. In the 1971-72 program year, two additional ESCs were funded (Wichita Falls and Edinburg*), bringing the total ESCs involved in Phase

*Edinburg was approved for funding but did not become operational until July, 1972; therefore it is not counted in the total ESCs involved with Phase I programs.

I programs to 16 (representing about 18% of the total "set-aside" expenditures--See Chart 1). In 1971-72 approximately 5,200 students received prevocational services, the majority of whom would be participants in some part of these Phase I programs. Responses from the ESC questionnaire show approximately 2,160 students on whom vocational evaluations were completed. There is no data which indicates numbers of students receiving prevocational services in other categories. The Education Service Centers are regional by design and cover areas ranging from 6,356 square miles to 37,553 square miles. The number of local school districts within a given region served by a service center ranges from 38 to 104, with the average (of those ESCs with Phase I programs who returned the questionnaire cited below) number of districts standing at 62. The unique status of the ESC has contributed to the diversity of program approaches, and each center developed its Phase I program to meet the special needs of the schools within the region it was serving.

The overview information for this section comes from personal visits made to ten ESC programs (Abilene, Austin, Beaumont, Corpus Christi, El Paso, Fort Worth, Huntsville, Lubbock, Victoria and Waco); an informational questionnaire (see Chart 3) sent to all involved ESCs (with the exception of El Paso);and visiting with many of the personnel involved in those programs not visited at a meeting for ESC-Phase I staff in Arlington in early March, 1972.

Of the 15 Phase I programs with similar emphasis (El Paso is again the exception as their program is unique and will be described later in this section), six had staffs consisting of one vocational evaluator only (also called pupil appraisal, vocational appraisal consultant and pupil evaluation). Four had two vocational evaluators on staff; one had three vocational evaluators on staff; and the remaining four had staff assigned as vocational consultants (or coordinators) in addition to one (two programs) or two (two programs) vocational evaluators.

The consultants and evaluators on the ESC Phase I staffs are generally well qualified (most have master's degrees), highly imaginative, dedicated and deeply interested in the needs of handicapped students. As a group they are open, honest and strongly verbal in recognizing both conceptual and operational strengths and weaknesses in the program. Undoubtedly, because of their small number throughout the state (28 in total) and their dauntless spirit, professionals in these programs are remarkably well informed as to what their counterparts are doing and have developed their own informal communication system (although they would have preferred--and would still urge--a more formalized system, such as more frequent group meetings and a monthly newsletter).

Value of Phase I

As in the case of Phase II programs, there is no comprehensive data available which could substantiate, in quantitative terms, the value of the ESC Phase I programs, answering questions like how a student's

participation in this program component affected his vocational training, or how many local schools (and to what degree) implemented the recommendations offered in the evaluation report prepared by the ESC. For a general overview of the program value, one must depend on the observations and composite experiences of the ESC personnel who have been involved in the day to day program operation. The consensus points to interrelated overall values as outlined below:

1. The ESCs Phase I activities have contributed significantly to the local school districts' realization of the vocational needs of special education students. Overwhelmingly the vocational evaluation reports on special education students submitted to the local schools by the ESC staff have indicated vocational potentials which the students could achieve with proper vocational training and related work experience. It has certainly been a case of accentuating the positive and indicates unequivocally the gap which presently exists in available training opportunities within local schools to maximize the student's realization of this vocational potential. The ESCs efforts in this area have had a "ripple" effect, in that many of the vocational evaluation reports have been seen by and discussed with superintendents, principals, vocational directors, special education directors, counselors and teachers. This "ripple" has increased the awareness, particularly on the part of administrators

of the special needs of the special education student and has accomplished at least a minimal focus on this special group.

2. Another value of the ESC Phase I program has been its role in developing better communication (and concurrently, coordination) among those entities vitally involved with special education students (Special Education, Vocational Education and TRC) as well as those not so closely involved but equally vitally needed: curriculum development divisions, administrators, counselors, academic institutions and health personnel. At least one ESC has seen the role of developing dialogue among the groups mentioned as one of its highest priorities.

3. The effect on the students being evaluated has been at least observed as positive. For many students this was the first time that they had realized that they had potential of any kind and were capable of achieving and were therefore not "second class students" as many of them had expected they were.

4. The value of the mobility capability of the ESC should also be mentioned. The ESC staff took its service to the school, with the exception of Beaumont, a tremendous help to many small school districts with below 300 ADA. This "on site" direct service practice to the schools was in itself a departure from the usual methods of evaluating public school students vocationally. Traditional practices have involved transporting students to a

rehabilitation facility for evaluation. This "on site" practice has also stimulated a sense of realism and personal rapport for the student. It has also precluded the students from being awed or becoming apprehensive about adjusting to facilities other than his familiar public school environment.

5. The diverse approaches of the ESCs and innovative material developed and used by many of them has contributed to a considerable pool of information regarding vocational evaluation of handicapped students. This pool of information is the necessary base for program expansion, regardless of what direction such expansion takes.

Variety of Approaches

All the ESC Phase I programs (except El Paso) have two major responsibilities or goals in common:

*1. Determination of occupational interests and capabilities of referred students,

2. Development of specialized curriculum and orientation programs.

In addition, the client group being served (14 to 16 year old special education students) is relatively consistent throughout the state.

*This emphasis was changed for several programs entering third year operation in 1971-1972 from the ESC staff responsibility of conducting student vocational evaluation to the ESC assuming the role of trainer, and assisting local districts to develop and conduct their own vocational evaluation of students.

The difference in approaches has been more evident in the vocational evaluation segment of the program than in the development of orientation programs. There appear to be two major program divisions regarding methodology utilized for vocational evaluation in Phase I programs throughout the state:

1. Exclusive use of standardized psychometric tests and,
2. Combination of psychometric standardized tests together with job sampling or work sampling techniques.

On the informational questionnaire cited earlier, five of the 13 reporting ESCs show no job (or work) sampling being used in their vocational evaluation. The percent range of the 13 ESCs who utilize work sampling is from 0 to 70% with five reporting 30% or higher (1 - 30%; 1 - 35%; 1 - 40%, 1 - 50%, and 1 - 70%). The remaining ESCs report 1 - 10% and 2 - 15%.

Another area in which the programs differ is in the depth of the evaluation which is a related function to the diversity of instruments and techniques used. Total evaluation time spent with each student ranges from three hours to 14 hours (although, as noted earlier, Beaumont--which did not respond to the questionnaire--evaluates students in their program for an average of eight weeks). The average time spent per student (from the questionnaire responses) is six and one half hours. The testing time span ranges from all in one day to seven consecutive days, with the majority using three to four non-consecutive days for the testing period. No implication of which approach is more effective is meant in this section

which looks at various differences. The consideration diversification in these programs is related to an attempt to (1) of necessity, successfully utilize materials, instruments, techniques, etc., which were not designed for use with these populations; (2) the desire to be innovative in the approach, to an extent; and (3) the necessity of developing programs to meet regional needs. Four unique Phase I programs are summarized below:

Corpus Christi ESC - This is the only ESC in the state which purchased and operates a 70 foot, specially equipped mobil unit for its Phase I student evaluation activities. The unit is moved to specified local school sites and stays a minimum of two weeks. The length of time it stays at one location depends on the number of students who need vocational evaluations. The ESC staff commutes daily to the location of the unit to conduct the evaluation activities. The region covers approximately 12,000 square miles in which 43 school districts are located. The Phase I staff has worked in some way with 25 of these districts. Students averaged 12 to 14 hours in evaluation activities (two hours a day; six or seven consecutive school days). Some of the advantages of using a mobil unit are:

1. The unit can move from school to school throughout a given region.
2. The unit houses comprehensive work sampling equipment.
3. There is a certain status seen for special education students (it's for them and "off limit" for other students).
4. The unit can be moved away from coastal areas in case of hurricane.

Some of the disadvantages are:

1. Large initial expense.
2. Cumbersome moving problems (must move on Sundays only, need to have reliable mover).
3. Moving hazards (flat tire, damage to unit).

Beaumont ESC - This ESC has a centralized work evaluation location (the students are transported to this site, as differentiated from the services moving to the student's locale). Another unique feature of this program is that it represents a cooperative agreement between the ESC, TEA, TRC, local school districts and Goodwill Industries (the site of the centralized work evaluation unit). Students remain at the site for an average of eight weeks.

El Paso ESC - This ESC was funded to expand their Project VIEW (Vital Information for Education and Work), an occupational information service system highlighting jobs which do not require a college degree as an entry requirement, to include occupational information (developed for 3rd grade reading level) relevant to handicapped students (primarily EMRs). Each job description is developed through considerable research (including employer interviewing and input) and consolidated both on printed sheets and on transparencies. The direction taken by the ESC was to develop for the handicapped vocational curriculum materials for special education teachers. At Level IV (Special Education), the teacher's materials are to give the students a general overview of the working world with no specific

emphasis on any particular occupation, rather acquainting students with knowledge concerning all phases of successful performance in any occupation. Level V begins to narrow the focus from general information about the "world of work" to general information about job families. At Level VI the job family is narrowed to the specific occupation of the student's choice.

In contrast to the regular VIEW project, which is an occupation information dissemination system, the VIEW for the Handicapped project is primarily a curriculum materials presentation which not only disseminates occupational information but also provides realistic job training information. The ESC has developed Teacher's Guides and Training Guides with which to present their materials.

Lubbock ESC - The unique feature of this program is the prodigious research and literature review undertaken by the Phase I staff in addition to their program operational duties. The two staff evaluators have meticulously followed up any resource information they have uncovered and carry on regular correspondence with noted authorities in the field of vocational evaluation throughout the country. The primary purpose of this research, review, and correspondence has been to incorporate the basic theory and practice of vocational evaluation techniques into the vocational evaluation program at this ESC. This program also features a multi-media angle in the approach to the administration of the various work samples and job samples utilized in the program battery. Brief

slide-tape presentations of orientation and instructions to the student before performing the task are utilized. This practice was designed and initiated to offset the limited verbal capacity of many of the students and to provide for a more standardized administration of the instruments to every student. These men have written extensively about Phase I programs, have read an extraordinary amount of material in this field, and have been generous in sharing their information with their counterparts throughout the state and the nation, as well as with others interested in the field.

Kinds of Tests Used

Phase I personnel learned very quickly that there were few instruments specifically designed for use with the primarily mentally handicapped population with whom they were working. For this reason, an impressive number of various tests have been tried by the ESC program people. Many were eliminated as it was found they had little predictive validity and were not providing data which would contribute to the development of an occupational diagnosis for the student. Within the first program year, all had used and were attempting to refine test instruments in four basic areas: performance or manipulative, achievement, interest and rating scales.

Again, utilizing composite information from the questionnaire returned by 14 ESC programs, the most frequently used tests (used by three or more) will be listed by category.

1. Peformance & Manipulative Tests

	# ESCs Using
Minnesota Rate of Manipulation	7
Purdue Pegboard	6
Bennett Hand Tool Dexterity	5
Pennsylvania Bi-Manual Work Sample	5
Minnesota Spatial Relations Test	5
General Aptitude Test Battery (GATB)	3
Crawford Small Parts	3

2. Interest Tests

Vocational Picture Interest Inventory	4
Geist Picture Interest Inventory	4

3. Achievement Tests

Wide Range Achievement Test	6

4. Rating Scales

McDonald Vocational Capacity Scale	3

These are the most frequently used tests as reported, but many ESCs use other tests on a less regular basis, so the list should not be construed as absolute by any standard.

As a group, performance tests were more widely used than any other grouping shown on the questionnaire with a percentage range from 5% to 60%, averaging 37%. Six ESCs reported 45% or higher utilization of performance tests.

Job and Work Sampling Techniques - As noted earlier, all Phase I programs are not utilizing the sample technique in their vocational evaluations. Those who are using this technique have generally modified

existing sample designs or developed their own to reflect a range of industry within their area.

At least one ESC Phase I program has made a detailed attempt to utilize job samples in its vocational evaluation battery based upon a local job opportunity survey conducted by the consultants. Some of the information which can be obtained through use of job and work sample techniques include: durability, work habits, dexterity, attitudes, aptitudes, ability to follow directions, frustration level and work tolerance. There is no standardization on this type of work sampling (between the ESCs), and the subjective evaluation may vary from evaluator to evaluator. Nevertheless, a concrete task (as contrasted to an abstract test) seems to make many students feel more secure in the evaluation setting and much worthwhile information can be obtained.

Purpose of Testing

While the conceptual purpose of Phase I testing was primarily for determination of an appropriate training area (the first sequential step--feeding into Phase II), the reality of limited Phase II programs within the regions made the purpose less clear-cut. Several ESCs had only one or two Phase II programs in schools in their entire region (see Chart at end of this section). It was certainly frustrating for the vocational evaluator (and, one would think, for the student) to determine feasible training areas for students, and to find there was no training available. Equally frustrating was the simplistic reality of the few existing Phase

II programs, with one unit only or one unit for girls and one for boys (detailed in Section 1). Perhaps some value was gained through teachers' use of report information; however, this, too, was limited as explored below.

How is Information Utilized, By Whom

The greatest use of the vocational evaluations was made by the Vocational Adjustment Coordinator, as best this observer can judge, in determination of areas for job placement in the cooperative program. In addition TRC Counselors have used the ESC write-ups in obtaining services needed to help make a student employable, and they have indicated that they are helpful in work with parents. The use of this diagnostic data by TRC Counselors is in itself a departure from the usual procedures as they have traditionally had to "purchase" a vocational evaluation of some type from a private rehabilitation facility, or they had to utilize their own rehabilitation facilities, some of which have vocational evaluation capability. Suffice it to say these evaluation programs have been helpful to TRC Counselors to a degree. The answers shown in the questionnaire responses seem to indicate the purpose of testing was for determination of both vocational training areas and job placement areas, the deciding factor generally being the age of the student being tested (14-15 for for training; 16 or older for job placement). Seven ESCs answered "both" for purpose of testing, four answered "training" and three answered "placement."

Inquiries were made whether or not results of vocational evaluations completed on students in schools without Phase II programs would be tallied by job areas to substantiate development of programs, but all responses to this were negative.

Completed vocational evaluations on students are compiled into individual student reports which are given to the local school. The length and details covered vary from program to program, but essentially all written narrative reports should include test names and scores as well as interpretation of the test results. Generally, the reports also include a historical summary, description and observation of the student and a summary of recommendations. The questionnaire returns indicate a relatively even breakdown of the type of reports written, whether prescriptive or general: four ESCs report prescriptive; five report general and five report combining both in the same report.

Who, besides the referring teacher within the local school, obtains the report varies from district to district. The questionnaire responses indicate the teacher (special education) is given the report from every ESC; others who are either given copies of the report, or who review it verbally, include the principal (7 ESCs), the counselor (8 ESCs), the Vocational Adjustment Coordinator (5 ESCs), Special Education Coordinator or Director (7), Vocational Director (3) and Superintendent (2).

It is far easier to determine to whom the vocational evaluation report goes than to determine how this information is used. Obviously this, too, varies from district to district depending on the local

schools' structure, on the number of vocational options available within the school, on the communication effectiveness at the local level, and on the receptiveness of the district personnel. As stated earlier, the VACs seem to be using the report summaries extensively for assistance in placement areas--either for work experience or for job placement. While undoubtedly many local schools have used the evaluation results constructively, the impression this visitor was left with more times than not was that the evaluation reports were filed in the student folder and were not used by school personnel other than the teacher. On a visit to one local school district Phase II program, a vocational counselor told the visitor he did not know vocational evaluations had been done by the ESC until six months after they were completed, and that he still had not seen one. The response of two ESCs to the questionnaire item regarding problems encountered in operating a Phase I program lends support to the impression stated. However, the other 12 ESC responses did not list these as specific problem areas although several alluded to it. One ESC staff person said one of the greatest problems he had encountered was "vocational evaluations shelved because of nonexisting vocational programs or nonexisting training stations." Another said: "A feeling of frustration when apparent valid recommendations are not followed up on by the local education agency."

Since there is little Phase I staff time available, follow-up as to what actually was done with the student compared to what was recommended is virtually nonexistent. Some staff have continued to keep in contact with the referring teacher, but realistically there is no thorough,

continual follow-up of the students evaluated. Because of this, any judgment as to how Phase I evaluation reports are being used is sheer conjecture. It should be remembered that the ESC is a service organization, dependent on the local schools' invitation to work within it. They can only furnish information to the school and have no authority (or inclination) to pressure the school to utilize this information or to intervene with the school structure as to internal distribution of such information.

Relationship to Phase II

It has already been mentioned in other parts of this overview that the relationship to Phase II is a tenuous one and, obviously, dependent on whether or not there is a Phase II program in the referring school. As stated in Section 1, there are 77 school districts in the state who have Phase II programs. Nineteen of these districts are in regions where the ESC did not have a Phase I program, leaving 58 Phase II programs divided among 15 ESCs:

PHASE II PROGRAMS GROUPED BY
ESC REGIONS WITH PHASE I CONTRACTS

	ESC Region #															
# of school districts with Phase II programs	2	3	5	6	7	9	10	11	12	13	14	15	16	17	18	Total
	3	None	4	3	5	1	3	9	2	7	2	3	8	5	3	58

PHASE II PROGRAMS GROUPED BY
ESC REGIONS WITHOUT PHASE I CONTRACTS

# of school districts with Phase II programs	ESC Region # 1	4	8	19	20	Total
	3	7	None	1	8	19

This distribution makes a sequential relationship all but impossible. Little has been said regarding the orientation activities of Phase I programs. According to the questionnaire answers, these activities represent an average of about 10% of the Phase I staff's time. The orientation experiences, even though limited, seem to elicit good response from the students and, in some cases, from special education teachers who are interested in utilizing more vocationally oriented materials.

Section 3

State Schools and State Hospitals

In 1971-72 there were eleven state schools and four state hospitals operating pilot programs for vocational education of the handicapped, representing 22.5% (approximately $587,000) of the total state expenditure in pilot programs (Chart 1). Of these programs, three were initiated in the 1971-72 school year (Corpus Christi State School, Terrell State Hospital and Big Spring State Hospital), two were entering their second program year, and ten were beginning their third program year.

Of the eleven state school programs, nine are in special schools for the mentally retarded operated by the Department of Mental Health and Mental Retardation (MH/MR). The state hospitals operating pilot vocational programs are also administered by MH/MR. The remaining state schools with pilot programs are the Texas School for the Blind and the Texas School for the Deaf, administratively under the Texas Education Agency, Assistant Commissioner, Department of Special Education and Special Schools.

Each of the nine involved special state schools for the retarded is an authorized independent school district and is therefore eligible for funds distributed to educational units; however, none have been authorized to receive funds through the State Minimum Foundation allocation. Funding for educational activities in these state schools has come primarily through direct grants from ESEA Titles I, II and III; NDEA Title III; and Adult Basic Education (ABE) apportionments. The state hospitals only receive Title I and ABE funding. Training for specific careers prior to the pilot programs which began in September, 1969, was virtually non-existent in the state schools and hospitals under MH/MR administration, although state vocational education funds were allocated to the state schools for the blind and for the deaf.

Pilot vocational funds in state school programs are being used in Phase II programs in fifteen different vocational categories, eight of these represented at one school only. The categories offered most frequently are the same as those in the majority of pilot vocational programs in the public schools: Home and Community Service (H&CS)--five schools;

Building Maintenance and Repair (BM&R)--three schools; and General Construction Trades (GCT)--three schools. Chart 4 shows the categorical breakdown. The number of categories offered at each school varies from one only (three schools) to three or more (three schools).

In the state hospital programs, there are seven vocational categories offered, each at one location only, with one hospital having three categories, one having two categories and the other two having one only.

Visits were made to seven state schools for retarded*, the State School for the Deaf and one State Hospital (Austin State Hospital), which are the primary source of information for this overview section, together with the invaluable assistance of Don Fariss, the vocational liaison staff person assigned to MH/MR.

In 1970-71, 570 students were involved in these programs, approximately 95 of them in vocational programs at the state hospitals. The 1971-72 totals are not yet complete but will probably represent an increase to about 650 students since three new programs were added during this program year. Students in the pilot programs are primarily in the 14 to 21 year old age group.

Overall Program Value

Certainly the greatest overall value of this program has been the

*State Schools: Austin, Abilene, Denton, Lubbock, Mexia, Richmond and Travis.

availability of vocational funds for the state schools and state hospitals to enable them to develop and operate vocational units. This has been especially important to the state schools for the retarded, as the vocational program development coincides with the state's emphasis on discharging the majority of EMR residents from the state schools to be absorbed into their home communities, a more "normalized" atmosphere for the individual. It is obviously of critical importance that each resident be as adequately prepared as possible to adjust to the "outside world" prior to his discharge, and the vocational training programs have had and are having a key role in this preparation.

Another observed value has been the effect, however limited, the vocational programs have had on modifying the academic curriculum into more "functional" approaches than had been evidenced prior to these programs. While there have not been "sweeping" changes in the academic offerings, there have been enough modifications to show at least some effect.

Planning Basis

Throughout the state, most of the state schools involved Texas Rehabilitation Commission (TRC) staff, usually at the regional levels, in determination of which vocational categories to develop into Phase II programs. Only one state school visited (Mexia) indicated that it had done its own researching of job areas compatible with the abilities of their students in conjunction with employer needs in the surrounding

areas. This was done through utilization of economic research data from Baylor University and was in addition to the input from RRC staff also solicited.

Unique Problems of Client Groups

The state hospital client group involved in these pilot programs is far more transient and intellectually varied than students in other vocational programs for the handicapped. Many from this group may be in the hospital only for 90 days before their discharge. The frequent new entries into the vocational programs and equally frequent terminations from the program create unique problems for the vocational teacher trying to maintain some measure of continuity in the subject. The usually short-term involvement also makes it impossible for the student to attain any degree of competency in a vocational area which requires a lengthy training period. For this reason, state hospitals have to look at their vocational programs in three ways:

1. short-term vocational training areas for the 90-day client whose aim upon discharge is immediate employment;

2. longer-term vocational training for those clients who are staying in the hospital for longer periods; and

3. "interim" vocational classes for younger clients who are on short-term stay and who plan, upon discharge, to return to their local high schools.

It is important to recognize the motivational factor which vocational training affords the short-term client. Often, the client's exposure to

and experience in the vocational training at the state hos ital provides motivation to seek additional training from his local school district upon discharge to his home community. Too, even short-term vocational training can provide a basis for the Texas Rehabilitation Commission to place the client in on-the-job training in a job related to the training upon the individual's discharge to his home community.

The population in the state schools for the retarded is more stable (from the perspective of length of time in residence) and represents a range of abilities within the limits of the mentally retarded classification. The vocational program at Mexia involved an approximate seven to one majority of EMR to TMR students, but this was atypical of the statewide participation in residential schools for the retarded. Based on the visited schools for the retarded, the statewide majority of students participating in the Phase II programs is estimated to be a three to two ratio, with the TMR in the majority.

Vocational training for the TMR needs to be long-term because of the constant repetition necessary to insure learning. The residential schools have a major advantage the public schools cannot have in that the living environment is controlled, and the learning of social skills and general adjustment is continually reinforced. In state schools operated under the unit system (one supervisor responsible for all aspects of the environment of students in his unit--residential, educational and supportive services), the team effort of all personnel involved with the student seemed effective, and there was frequent communication among residential staff and teaching staff.

Teachers and Curriculum

As in the case of the public school pilot programs, teachers in the pilot vocational programs in the state schools and state hospitals are state certified vocational teachers. Many of them are outstanding in enthusiasm and creative ability to teach their vocational skill area to the residential students in their charge. The majority of the teachers visited in the state schools for the retarded expressed their desire for specific training in teaching the severely retarded student, not from a theoretical approach, but through observing demonstrations showing the "expert" actually teaching a group of retarded students.

With the exception of Mexia, none of the schools visited had printed (or formalized) curricula. Most of them were trying to develop their own, with admittedly varying degrees of success. Only two of the visited schools, Lubbock and Travis, indicated they were utilizing some form of off-campus experience coupled with the vocational classes--both sending an adult with a small group of students to complete a task under a prearranged contract work agreement in the community in custodial work or grounds maintenance. In both cases, this off-campus practical application of the on-campus vocational course work was highly motivating to the students, and the individual's vocational growth was observable to the teachers. The other state schools were utilizing practical application through on-campus work assignments but did not have this "promotional" aspect in their programs (the "best" performance on-campus led to a "promotion" to the off-campus work, a not inconsiderable incentive to the resident).

Relationship to Phase I and Phase III

Relationship to Phase I - Two of the visited state schools for the retarded (Mexia and Richmond) had Vocational Orientation (or Occupational Orientation) staff funded through the pilot program grant. The other schools for the retarded utilized their own resources at the school (psychologists, usually) or had large evaluation units available on campus. (Abilene State School has a TRC operated evaluation unit; Denton has a prevocational unit funded under Title I).

One of the special schools visited (School for the Deaf) has a Phase I unit funded through the pilot program grant in addition to its Phase II program.

Generally, this observer found little involvement of the Regional Education Service Centers with the state school or state hospital programs, except in Lubbock where the Phase I personnel from the ESC shared much of their information with staff from the Lubbock State School.

Relationship to Phase III - As in the case of the public school programs, Phase III (job placement and follow-up) for the state schools and hospitals is the responsibility of the Texas Rehabilitation Commission. In some state schools, particularly in those cases where TRC has staff housed on the school grounds, the relationship appears to be excellent. With other schools the relationship varies considerably, in many cases due to the personalities of the individuals involved. TRC placement figures

through June, 1972, show 242 persons placed on jobs from state schools, some of whom were involved in the Phase II programs, but exact numbers are not known.

The most frequently heard criticism of TRC from state school people was that they are too "closure" oriented, and the person is not as important as the "hashmark" on the records. Because of this, TRC is said to "cream" the best students and not work with the lower group, and they are placing students on any job available whether or not it has any relationship to the type of vocational training received.

While these criticisms may not be totally justified, the type of job on which a student is placed--and whether or not it is related to the type of training undertaken--is vitally important, particularly if this is the sole basis on which the success of a vocational program is judged. The question can well be raised, "Can the school (or hospital) be held accountable for a program's success when they do not control the job placement aspect?" Perhaps another question can be asked, "Is job placement in the area in which trained--or a related area--the only measure of success against which a vocational program should be evaluated?" These are questions which need to be discussed--and resolved--perhaps in favor of success being measured in terms of students' ability to maintain a job--or to improve their job level through obtaining better employment--rather than only the type of job on which he is originally placed.

Highlights of Three Programs

Mexia State School - This program is unique for several reasons: the school is one of the oldest in the state, is located in a primarily rural area (the closest city is Waco, about 40 miles away), and developed the first vocational curriculum. Under the direction of a dynamic vocational supervisor, the program has two vocational orientation teachers and four vocational class areas (GCT, CMR, H&CS, and Horticulture Related). The staff worked extremely hard developing their vocational program, both in writing their vocational materials and physically in renovating space for the program. The curriculum guide written is an impressive document which details the Phase I-exploratory program developed by the staff, including descriptions of the original work samples devised, and the Phase II training programs, covering Basic Skills, Basic Skills Achievement Checklists, and courses of study (with sample lesson plans) for each job cluster area in which they are working.

Abilene State School - The unique feature of this program is the regional vocational evaluation and training center operated by the Texas Rehabilitation Commission (one of four such TRC centers at state schools throughout the State). The state school is operating two pilot vocational education units (Food Service and Building Maintenance and Repair). Students in the pilot program have access to the school's sheltered workshops (operated through other funding) and to the TRC center. Phase II students are more likely to utilize the center after their vocational

training is completed rather than prior to the training. For the Phase II students, it seems to operate more as a "finishing" center, giving TRC staff the opportunity to closely evaluate work habits, self-discipline, attitude and production rate through performance on contract work in the center, before outside placement. Each student in the center is paid at a rate based on his individual production (the center pays one of three rates based on production groupings: bottom, middle, or upper), and his center experiences include learning money management through shopping trips to town. When the center staff feels the student is ready for competitive placement, the Rehabilitation Counselor seeks an appropriate job opening.

State School for the Deaf - This school has developed a comprehensive vocational evaluation unit with funds from pilot vocational money in addition to its Phase II program funding. The capable supervisor of this unit attended training sessions in New York to learn about the TOWER system and set up the evaluation unit upon his return, utilizing TOWER materials where possible and developing specialized materials for the deaf where necessary. Each student evaluation averages 36 hours of student involvement--four mornings a week for three weeks. Each staff person can work simultaneously with one to four clients. From the Phase I participation and results, a student can be referred to one of five Phase II vocational classes operating in the school: Building Maintenance and Repair, Commercial Art, Electronic Assembly, General Construction Trades and Horticulture Related.

Section 4

Junior Colleges

Five Junior Colleges currently have VEH programs in operation. Paris Junior College has two units, and San Antonio, Tarrant County, Dallas County, and Kilgore Junior Colleges each have one unit. Expenditures for 1971-72 in these programs represent about 3% of the total VEH funding in the state (see Chart 1). Site visits were not made to any of these programs, therefore only summary program information will be presented for three of them. The others are San Antonio Junior College which has piano tuning training for blind students, and Kilgore Junior College which has an occupational unit in horology.

Dallas County Junior College District

This is a rapidly expanding junior college system (with an "open-door" admission policy) which presently has three campuses and will soon have a fourth. The VEH program's purpose is to provide special services necessary for deaf and blind students to attend classes at the junior colleges--interpreting, notetaking, tutoring, equipment, and counseling. Special emphasis is placed on acquisition of knowledge and skills and development of social behavior for increased participation in society. They have a number of objectives in (1) direct services to students (including initial orientation, providing liaison with vocational training and employment offices, and work orientation, in addition to the other services shown above); (2) providing training for counselors, staff and

faculty; (3) providing orientation to the entire student body to promote cooperation and participation in class and nonclass activities; and (4) studying the needs of the adult deaf and blind in the community.

Paris Junior College

This institution has a vocational training program in horology and jewelry making for orthopedically handicapped students and plans to include deaf students. The program offers supportive training in the areas of basic communication, personal grooming, elementary bookkeeping and basic math in addition to skill training. The program almost doubled the number of participating students from the first through the second operating year (from 17 to 30) and in the current program year expanded to serve 45.

Tarrant County Junior College District

This program is operated to provide special services to the deaf to enable them to be integrated into the regular vocational program of the junior college. Students are served on two campuses and must have been enrolled in a vocational area prior to being accepted into the program. Services provided include vocational evaluation, counseling, assistance in adjustment to the hearing world, supportive services (interpreters, notetakers, tutors), access to the full vocational program of the college (34 occupational areas), job placement, follow-up and evaluation. Throughout the program, emphasis is placed on development of social skills necessary for adaptation to the hearing world. Admission to the Junior College system is open to all.

CHAPTER III

RECOMMENDATIONS

Section 1

For State Level Administration

Vocational System

Contemporary writings interpreting the Amendments of 1968 emphasize delivery of vocational services to "all," "goal of zero rejects," "everyone," "part of every educational experience," etc. Yet, do we really mean everyone in the school universe--the slow learner, the disadvantaged, the retarded (EMR), the physically handicapped, the visually and/or hearing impaired, etc.? Is it our goal to bring this previously excluded group into the mainstream of vocational education or to provide vocational services to certain segments of the "all" on a separate basis, i.e., developing a dual vocational system? The first question seems to be answered in the affirmative (the concept itself is impossible to be "against"), as the state education policy makers, the Vocational Advisory Council, and many educators at local levels verbalize the conceptual idea that all students should leave the educational system equipped with necessary work skills. The second question with its full ramifications does not seem to be resolved at any level. It is not a simple question to resolve--yet the direction the state is going to take should be determined before any further programming efforts are implemented.

Texas has taken a clear stand on the direction the state is mandating for special education in the academic area. Senate Bill 230, known as

Plan A, directs the special education student into the regular academic mainstream on a basis of functional ability with resource personnel available to support both the student and the classroom teacher. The planning, conceptualization, the enabling state legislation and the pilot implementation of Plan A leave a formidable gap in the area of vocational education. This observer has not been able to find any guidelines or written conceptualization as to the relationship (if, in fact, there is any) between Plan A and vocational education. It is difficult (well nigh impossible, in this observer's opinion) to defend the concept of a separate vocational system for handicapped students. (There will be more severely handicapped students who will probably always need self-contained classes, such as the TMR group, but these will represent a very small percentage of special education students.) There is no question that this approach is far easier to implement as it avoids the direct confrontation that an "integrated" system must first resolve. The fact that it is easier (and thereby enables programs to be more quickly developed and operational) in itself is not defense enough. The other factors which need to be considered include:

1. The effect on the students.
2. The economics of a separate system.

Effect on Students - It has to be recognized that when a student leaves the educational system and is absorbed into the work force, generally he is working for and with nonhandicapped persons. His

orientation and training toward work must help him learn to live and work in the world in which he is a minority. Rehabilitation philosophy has always been recognition and emphasis on a person's abilities, not his disabilities; categorization (and self-containment) by disability would seem to reinforce the negative.

It also seems the argument advanced by the National Advisory Council on Vocational Education for directing the disadvantaged into the mainstream of vocational and technical education is equally applicable to the handicapped:

> Federal legislation now encourages the development of separate programs for the disadvantaged. Such programs say to the disadvantaged that they are second-class citizens who cannot make it in the mainstream. Such programs appear to shut the door to career advancement. What the disadvantaged want and need is access to vocational and technical programs for career preparation in the mainstream. Counseling, tutoring and other support and assistance are essential, but separateness destroys dignity.[1]

The Economics of a Separate System - To provide "high quality vocational education" to handicapped students in all schools in a separate vocational system would entail enormous expenditures for equipment alone. The Second Annual Report of the Advisory Council for Technical-Vocational Education in Texas presents dramatic factual information which clearly

[1] "The Flow and the Pool," Second Report of the National Advisory Council on Vocational Education in Contemporary Concepts in Vocational Education, ed. by Gordon F. Law (Washington, D. C.: American Vocational Association, 1971), p. 50.

points to the need for increased vocational offerings for regular students throughout the state. Since it has been established that present vocational funding is not sufficient to meet the needs of Texas high school students, it would seem illogical to suggest that funds be diverted for development of vocational offerings solely for handicapped students--a relatively small percentage of total high school students in need of vocational education. Page 11 of the Summary of the Second Annual Report of the Texas Advisory Council points out that while 117 schools have been designated as area vocational schools in the past seven years, 80 more desire such designation but are unable to obtain it because of lack of facility funding.

Chart 5 shows that 811 of the 932 high schools in the state which offer vocational education (661 having vocational agriculture and homemaking only) have ADA (Average Daily Attendance) of less than 900 students; nearly 600 of them having less than 300 ADA. This means that nearly two-thirds of the high schools throughout the state with vocational education units have small student bodies and, proportionately, smaller numbers of special education students.

The timing is certainly opportune to include the majority of handicapped students when planning expansion of one vocational system throughout the state. The largest single handicapped group in Special Education (with the exception of the speech category) is the EMR, with some 39,233 (ages 6 to 21) enrolled in Special Education in the 1971-72 school year. Presently, the majority of EMR students of high school age are placed

in the cooperative program in lieu of vocational training--most of them obtaining work experience and ultimate placement in low level service jobs. It is felt by many that most of these students have potential for higher level jobs if they have the opportunity to participate in vocational training.

RECOMMENDATION: *That Texas resolves the direction to take in the vocational education of handicapped students in favor of directing the majority of them into the mainstream of vocational education.*

If this recommendation is accepted, communication and coordination must be improved to insure that all interlocking facets in the educational process contribute to the readiness and acceptance of special needs students into the vocational system.

Communication and Coordination

If it is agreed that the timing is right and now is the time to greatly expand vocational opportunities for all students in Texas, the planning, development and coordination of such a system will require a flexibility and communication among the involved disciplines heretofore not evidenced. Past and present approaches at the state level seem to have been based on the premise that special education, vocational education and vocational rehabilitation each had rigid structures, and whatever cooperative effort was agreed to was confined to that which fit into the existing structure of each. Implicit in this pattern is the

threat that something would be taken away from one at the expense of another.

As the three disciplines developed, each structured policies and guidelines independent of the other, all of which became increasingly complex and rigid through the years, perhaps seen as necessary for survival. Historically, each group has had developmental problems within its own ranks as well as outside. The reasons for the jurisdictional fears may be historically valid, but the reasons are not nearly as important as the present question--where do we go from here? How can communication among the top administrators be affected to structure a team approach.

Maximum probability for success in an integrated vocational system will require each of the two educational divisions to look carefully at its present programs to determine what changes need to be made. For students with disabilities to be absorbed into the mainstream of vocational preparation and training, adaptations are required from Vocational Education, Special Education and Vocational Rehabilitation, each must be willing to admit what he can and cannot do for the student, and <u>together</u> they must mesh their talents to develop stronger, more flexible programs to meet the needs of the individual--not expecting the student to fit into <u>any</u> particular program.

<u>Vocational Education</u> - As vocational education has expanded, increasingly rigid entrance requirements have developed as to academic prerequisites.

The apparent desire for "only the best" students to be accepted into vocational classes seems to be the result of an over reaction to the early developmental stages of vocational education when only the problem students (discipline and/or academic failures) were funneled into the vocational courses, almost as a "last resort" effort. Through the years, vocational education has had to offset the reputation which was a reflection of these types of students. In an effort to upgrade the image, vocational education has become increasingly "screening out" conscious, even to the point of having an item on the state's evaluation guide which asks for a "yes" or "no" answer: "Vocational education programs are not used as a 'dumping ground' for problem students."[2] One could well ask, "Would the student be 'a problem' if he were involved in something in which he was truly interested and felt was relevant?" Does not vocational education offer the ideal opportunity and the kind of setting which could well channel the interest of such a student? The emerging popularity of vocational education, and growing public interest in the field, heralds the time for vocational educators to take a critical look at themselves and their programs and re-examine their position on student selection. The question has to be asked, "Can the student learn this skill?" However, screening-out methods need to be questioned and new methods developed to enable the question to be answered based on the student's performance in the skill

[2] Evaluation of Vocational Education in the Public Schools of Texas, Texas Education Agency, September, 1971; H-4 - Item #10.

training area. In addition, vocational education units need to be developed in progressive levels of skill requirements, i.e., the area of automobile related could be divided into skill training for jobs in service stations; specialized single repairs such as tire changing, brake repair, etc.; paint and body; specialized more technical repair areas such as electrical systems, transmission, etc.; as well as highly skilled, all-around motor mechanics. Developing specific performance requirements (as determined by the employers) for each level of sophistication would enable students to move through progressively more difficult training to their maximum potential.

The required academic courses also need examination. For the academically limited student, are they vocationally related? Are they relevant to the skill area being pursued? Does the vocational teacher understand methods of teaching special needs students?

Special Education - This Division needs to examine the preparation of the special student to enter vocational education. Is the student learning self-discipline, a sense of responsibility, and basic adjustment skills such as telling time, counting change, communication ability, etc.? Are the Special Education teachers encouraging independence in each student? Does each Special Education teacher understand the expectations of employers, of vocational teachers? Is there a system to identify realistic vocational potential in each student? While there is a very real danger in over-simplifying the problem of teaching vocational skills to students with

spec al needs, there is an equal danger in magnifying, dissecting and analyzing why the student can't learn, or all the reasons why he shouldn't be expected "to compete" (justification for his limitations, which is self-defeating). It seems more feasible to identify and develop his talents to whatever his potential, letting the judgment be made more by observing him in action rather than on a basis of prediction.

It can readily be seen that each division needs the continual input of the other. It cannot be a case of "your student" or "my student" as this reinforces the concept that neither understands the other. They must be approached as "our students," with both divisions receptive and flexible in planning and developing programs which blend the expertise of each toward the common goal of vocational adequacy for each student.

Vocational Rehabilitation - This agency must be continually involved in a service delivery system as handicapped students who leave the school system are their direct charge and students within the system, generally 16 and older, are their indirect charge. If handicapped students are vocationally prepared throughout their school years, then they should not require as many rehabilitation services in their adult lives as those vocationally unprepared when leaving the school system. A "teamwork" approach at the school level insures better utilization of resources--and a savings of tax dollars.

Many thousands of vocational rehabilitation dollars are being spent annually to send handicapped students who have graduated from Texas high

schools (in Special Education, usually) to proprietary schools for vocational training. If the student is capable of learning a vocational skill in a private school, why is he not seen as capable enough to enter public school vocational training? If he can be integrated into vocational training in the public school, can rehabilitation pay for necessary supportive services while he is in school? Could the responsibilities for the VAC and VRC be combined into one position (the VACs) who could be allowed to requisition services for his students within a budget allocated to him by TRC? If this can't be done, what arrangements could be made to house the TRC counselor on the high school campus to enable closer communication and better planning and coordination?

Presently, it is true that there are meetings with the involved agency people, but talk does not necessarily connote communication. Dr. Bruce Mattson, Chairman of the Department of Special Education at Texas Tech University, stated this beautifully in a speech last year to the Second Annual Teacher's Workshop for vocational teachers working with pilot programs for the handicapped when he said, "...some of the things I hear tell us that we are really not talking to one another as we need to if we have the interest of this youngster or these youngsters at heart...If we are going to work in a team effort, we have to be willing to hear the other person's point of view and really respond objectively to something which would bring us a better kind of structure or operation."[3]

[3]Bruce Mattson, "Vocational Education for the Handicapped: Bridge to Independence," closing address at the second annual Teachers' Workshop, in Vocational Education for the Handicapped (Austin, Texas: Texas Education Agency, 1971), p. 75.

There seems to be no question in anyone's mind that the three disciplines involved--vocational education, special education and vocational rehabilitation--are each equally needed to accomplish the goal of work adjustment and success for each handicapped student. Each is a necessary link in the chain to the student, and if one were eliminated the student would suffer by being on the short end of the chain, if you will.

RECOMMENDATION: *For the top administrators of Special Education, Vocational Education and Vocational Rehabilitation not only to listen, but for each to listen with a willingness to make adjustments in direction and reallocate priorities, where necessary, to provide the best possible services to handicapped students. In other words, for state level planning to start with the specific needs of the handicapped student--and the subsequent designing of a single optimum system of delivery of services to these students--rather than attempting to fit services into three existing structures. It would seem advisable for a position paper to be written by representatives of all three disciplines and signed by the three top administrators for distribution throughout the state education and rehabilitation channels.*

Dissemination

Once state relationships are clarified--and a system agreed upon which insures a team approach--this information must be disseminated in an effective manner. Before dissemination, it should be certain that the

system:

1. clearly delineates responsibility areas,
2. has performance based criteria developed within each area of responsibility, and
3. has a method of monitoring (or evaluating) performance that will be accomplished at regular intervals.

While it would be naive to assume personalities of people in key positions will not influence cooperation, a system needs to be devised which will minimize personality influence and maximize objective accomplishment measurements in each responsible area.

Before looking at the local picture, it should be mentioned that many professionals working within these departments at the state level have developed positive working relationships with their counterparts in other departments and have worked together as teams within the present framework. If a strong team approach were developed and operated from the top levels, it is felt the staff efforts would be even more effective.

At the local level interdepartmental communication varies from extremely good (particularly in small school districts) to relatively poor. Also, at the local level, administrative support and commitment to programs for the handicapped varies considerably, but generally this area is apparently not seen as a high priority.

Support must be obtained from school boards, superintendents, principals, and directors of vocational and special education to establish and nurture an atmosphere which would allow and insist that teachers of both disciplines (vocational education and special education) meet their

students' needs as a team.

The writers of the Report Evaluation of the Second Annual Teacher's Workshop recognized the separatism of the involved disciplines as a grave problem area when they stated: "One of the most serious problems to be resolved in the design of programs in the area of vocational education for the handicapped is where and how the educational coordination shall take place. There is little doubt that all of the elements of these three areas need to be included in a total program. Any program in the area of vocational education for the handicapped that does not include meaningful components from all three disciplines will be the poorer for their lack."[4]

RECOMMENDATIONS: *After agreement at the highest state administrative levels of the direction which vocational education of the handicapped will take in the state and the design of a coordinated team effort, such information should be disseminated to local levels in the form of guidelines, developed jointly--in one document--and signed and distributed by all three. The state agencies should give high priority toward "selling" the concept to local administrators and boards of education.*

Special Needs Personnel

Effective September 1, 1970, the state staff responsibility for the

[4] Ibid, p. 5.

Coordinated Vocational Academic Education (CVAE) program, which was designed to meet the special needs of disadvantaged students, was assigned to field positions in the traditional fields of occupational education. In July, 1972, the state staff responsibility for vocational education of the handicapped was also assigned to the traditional occupational education fields.

The concerns voiced by the Texas Advisory Council concerning the CVAE reassignment, that "unless special precautions are exercised" certain problems could occur, are equally applicable to the reassignment of the programs for the handicapped. The possible problems which could occur with these reassigned staff responsibilities are:

1. "In an attempt to apply standards of traditional programs, the CVAE programs could be rendered inflexible and incapable of effectively serving the disadvantaged student.

2. Do CVAE teachers receive, under this reorganization, the specialized supervision needed?

3. The coordination between vocational and academic education is a strong and imperative aspect of CVAE, and every effort should be made to strengthen this aspect. Identification of the program as "purely" vocational could have a most detrimental effect upon the program."[5]

Only the Texas Education Agency could answer these concerns, based on two years experience of the CVAE program under the reorganized design. Is the program as effective and flexible as it was prior to the change?

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[5]Advisory Council for Technical-Vocational Education in Texas, Second Annual Report, September 1, 1971, p. 8.

Are the needs of the disadvantaged student being met?

Over half of the states in our country have either Departments of Special Needs or Special Programs in the Division of Occupational Education at the state level. There seem to be certain similarities between the vocational needs of disadvantaged and handicapped (particularly EMR) students, and there seems to be a distinct advantage (for the special needs student) to have a state level "ombudsman."

One or two staff from the state office could be assigned as resource "special needs" personnel to offer assistance to local districts in developing or modifying programs to meet special needs as well as monitoring existing programs to insure their effectiveness in meeting needs.

RECOMMENDATION: *The Texas Education Agency, Division of Occupational Technology, should designate at least two professionals as "Special Needs" consultants.*

Specific Program Planning

While the earlier recommendation stressed the need for program planning with all three involved disciplines, certain activities involve primarily the Texas Education Agency and therefore are mentioned here.

Career Education - With the priority emphasis throughout the state on development of career education programs from kindergarten through twelfth grade, it is extremely important that the developmental plans include special education students and materials geared specifically for

this group. If special education students are not included in the career education mainstream, they will be at an even greater disadvantage when ready for vocational training. If Special Education is going to develop a self-contained approach to career education (not seen as an "ideal" since it reinforces the dual system), then it would seem mandatory to include personnel from this discipline in regular career education training sessions for curriculum and program design.

Vocational Teacher Training - If it is determined that EMR special education students are to be included in the regular vocational programs, then regular vocational teacher in-service training should immediately begin to include input from special education in regard to teaching methods and general behavioral expectations from these special education students. It may also be feasible for the state to consider awarding a special grant to a teacher training university in Texas to develop a teacher training program leading to a dual degree--in vocational education and in special education.

High School Student Placement Departments - If increasingly frequent recommendations from national and state levels are followed requiring local school districts to assume responsibility for placement (and follow-up) activities of students from their system, coordinated planning must be initiated with vocational education, special education and rehabilitation commission well before local districts assume such responsibilities.

At that time, it may well be considered to move the VACs into such a placement department, under supervision of the vocational director. There is a great deal of criticism (some of it from VACs themselves), primarily at local levels, that job requirements for certification as a VAC do not include paid work experience in business and/or industry or counseling training. Dealing effectively with employers in areas of job development, placement and continuing contact is in itself a skill, and persons with experience only in teaching may find it difficult to understand employer's needs and expectations. There are many excellent VACs throughout the system, and many who have had broad work experience in fields other than education. The concern is more the present requirements for certification of future VACs than for VACs now in their jobs.

RECOMMENDATION: *All special teacher training, and newly developing programs which affect vocational education directly or indirectly, should involve special education and vocational education together in planning. The requirements for VAC certification should be reviewed critically, and consideration given to the necessity for work experience in business/industry and some formal counseling training.*

Pre-Vocational Training

If Special Education EMR students are to be seriously considered for inclusion in regular vocational classes at the senior high level, they need concentrated "hands-on" prevocational exposure and training at the junior high level. The Special Pilot Vocational classes have shown dramatically

that the EMR student is vitally interested in--and capable of learning--vocational skills. Providing vocational experiences to special education students in an industrial shop setting at the junior high level for two to three hours a day should accomplish several things:

1. provide a school setting which would interest the student,
2. provide vocational exposure (and awareness) for the student and prepare him for more skilled training at the high school level,
3. make "academics" more interesting and easier for the student to understand by relating the academic courses closely with the vocational laboratory setting, and
4. provide a setting which would enable realistic vocational evaluation of the individual's strengths and potential to be made over a long period of time.

RECOMMENDATION: *That Special Education develop pre-vocational shops at the Junior High level, with the assistance of vocational education, to be supported through Special Education funding.*

High School Vocational Training

The cooperative programs currently place many EMR students in work experience situations when the student is chronologically 16 or 17 years old but mentally about 12 or 13. Thus, he is expected to accept work responsibility at a younger age than more capable high school students. It is the feeling of many educators that the EMR student has a potential to learn entry vocational skills if trained properly and allowed sufficient time. It would seem more feasible to maintain the EMR student longer in the high school setting to allow him the training and maturing time

necessary for employment at a higher level than minimal service work. If the special education EMR student were prepared (through a concentrated, realistic junior high program) to enter vocational training at about age 16, it is felt that two or three years of training at the high school level would adequately prepare him for employment. The EMR student could participate in the co-op program for part-time work experience (related to his vocational training).

RECOMMENDATION: *That Special Education EMR students be allowed and encouraged to enter regular vocational training at the high school level with supportive services as needed. VEH money should be focused on high school level training with necessary supportive services and/or curriculum modification.*

It is further recommended that administrators of vocational education at the state level immediately determine funding priorities for VEH proposals from local school districts. A suggested priority emphasis would be:

1st - proposals for integrating special education students into regular, high school vocational training in Plan A schools. Proposals should include well thought-out supportive services to be provided to students to assist them in their adjustment into such classes.

2nd - proposals for comprehensive vocational adjustment centers in area vocational schools for vocational evaluation, counseling,

necessary on-going supportive services, and possibly self-contained vocational training classes.

3rd - proposals for vocational programs for the special education student that will utilize existing school equipment--either through scheduling times for the special education student when the equipment is not being used by regular students or after regular school hours (a "last resort" solution).

4th - proposals for separate vocational programs which include a team teaching approach--with the Special Education teacher in the same room (or adjoining room) with the special vocational teacher.

General Recommendations for Vocational Education Program Evaluation

Proposed program objectives should be examined carefully, before funding, to insure they are well thought-out and specific. Proposals need not be more complicated or sophisticated but do need more planning and documentation. Requiring more specific objectives in proposals would enable program evaluation to be undertaken as the program could be evaluated against the objectives. Vague, general objectives make evaluation all but impossible.

Self-evaluation of a program by the local school district is, by itself, not sufficient to insure a program is meeting the objectives desired. Regular, periodic program evaluations conducted by state education personnel to supplement local self-evaluations would certainly strengthen program effectiveness.

The high number of VEH programs operating in the state coupled with the immense geographic area to be covered suggest the necessity for development of an evaluation staff. The present multi-purpose consultants at the state level do not have time to be thorough evaluators in addition to their other duties. Two competent evaluators, hired with the understanding that they would be traveling constantly throughout the school year, could visit each project twice within the school year (spending one full day at the school site each visit).

Follow-up Studies

The state should consider, for the school year 1973-74, two follow-up studies:

1. An overview of VEH programs after one year's experience under the supervision of the regular vocational consultants to ascertain changes in direction or in effectiveness under the new administrative structure.
2. A student follow-up needs to be done on at least a sampling of special education students who have completed Phase II programs to determine if they have been placed on jobs related to the training, if the special education group who participated in Phase II training are in appreciably better jobs than special education students who did not participate in vocational training, and the students' (and their parents and employers)reaction to the VEH Phase II program.

Section 2

For Local School Districts

Planning Vocational Programs

While vocational programs are clearly the administrative responsibility of vocational education, the planning of any vocational involvement for special education students must actively involve both school disciplines (Vocational and Special Education), and could well involve the Rehabilitation Commission, too, in more than a cursory manner. The time for disagreement and conceptual misunderstandings to be worked out, particularly between vocational education and special education, is in the proposal planning stages and not after the program is operational. The project should be fully designed by both disciplines and should also obtain local school administration commitment and support at the planning and designing phases.

RECOMMENDATION: *That all proposals for vocational education of the handicapped be planned, designed and submitted jointly by the local administrators of Special Education and Vocational Education. The proposal should be signed by both parties before the State should consider it for funding.*

Area Vocational Schools

When plans are instigated for additional area vocational schools, space allocation should include provisions for an "Adjustment Center" for any student with special needs--disadvantaged or handicapped. These centers could

be dually staffed with vocational and special education personnel and should be comprehensive in design, similar to those in operation in Minnesota.*

RECOMMENDATION: *Strong consideration should be given to developing comprehensive vocational adjustment centers in conjunction with planning for new area vocational high schools throughout the state.*

Other Elements Which Need to be Included in Vocational Programs for the Handicapped

Whether vocational programs for the handicapped are self-contained or integrated into regula. vocational programs, certain elements should be included in the proposal design to insure maximum effectiveness of the training effort.

1. Class Location - The location of the training classes is extremely important; if self-contained, the classes should certainly be located on a high school campus. The related classes should be at least on the same campus and, preferably, close to the vocational class site.
2. Parental Involvement - Organized parental involvement should be included in a proposal design. Parent input can be obtained through regular telephone contact; a series of small neighborhood meetings in the evening at as central a point as can be located; Saturday

*See Chapter IV, Unusual Programs

"Open Houses" monthly at the training site (if possible, transportation could be provided by the school), etc. It is recognized that actively involving parents during a normal school day is nearly impossible, therefore, the necessary involvement will have to be attempted at hours compatible with the parents' schedules.

3. Employer Involvement - Employers must be actively and regularly involved with these programs in an advisory capacity. The first program determination to be made is how an employer (or employers) can assist the program: To review equipment and course outline for relevance? To review academic curriculum for relatedness? To observe students in training setting? To practice-interview students to determine job readiness?, etc. After this advance determination is made, employers can be approached for the specific purposes. This type of employer participation is not seen as replacing the structured Advisory Committees, but rather as supplemental support to a program.

4. Related Education - There must be continuous, receptive communication between special education teachers and vocational teachers working with special students. It will require strong administrative support to involve both disciplines together in curriculum development, in teacher meetings and in in-service training. It must constantly be reinforced that each has something to offer the other, and together they can most effectively prepare the student for vocational success.

5. Vocational Curriculum - It seems imperative that curriculum guides in the vocational cluster areas be developed if self-contained vocational classes are to be continued. Three years operation of pilot programs has produced some excellent course outlines and lesson plans, but there is no system to disseminate this information. One method of organizing materials for dissemination could be to develop a task force for each major vocational cluster area. Each task force could consist of four or five outstanding special vocational teachers from throughout the state who have taught in pilot programs in the cluster area, several vocationally-oriented special education teachers and one academic educator who could be designated as the group leader. The task forces could work (and be paid) for six weeks during the summer, at a central location, to produce curriculum guidelines for each vocational area. Such guidelines could well prove valuable for modification of regular vocational training, as well as for self-contained vocational training.

Section 3

For Education Service Centers

Vocational Education

If special education students are to be integrated into regular vocational classes, there will be an even more critical need for careful assessment of vocational potentials and abilities. As mentioned in the overview of Education Service Center (ESC) Phase I programs, the involved professionals

have a wealth of data in this area from their experiences over the past three years. Since limited staff is available for this service, it would seem the best utilization of their individual and collective talents for them to become trainers of the school personnel. The Austin ESC has refocused its Phase I program in this direction throughout this past school year. Its experiences, and degree of success, should be closely examined to see if this is an effective method to expand Phase I capabilities. If special education funds junior high school level pre-vocational shops, this would be an ideal group with which the ESC personnel could begin their training efforts. The pre-vocational laboratories should be used for on-going vocational evaluation and assessment as well as for vocational exposure, and the teachers would need training as to materials, methods, job and work related techniques and interpretation of evaluation results. Also, training school personnel to conduct vocational evaluation for special education students would hopefully have impact on dissemination of this information throughout the school channels as well as broadening the availability of such services to all special education students 14 and older.

RECOMMENDATION: *The existing ESC Phase I personnel should be utilized as trainers to enable school personnel to become proficient in conducting their own vocational evaluation of special education students. For each ESC Phase I staff member funded through VEH money, it is recommended that special education fund one ESC position for this purpose, too.*

Career Education

As indicated earlier, there is considerable concern regarding the absence of provisions for special education students in the already existing model programs for career education. This would lead one to conclude that, in actuality, career education will likely be for all students who do not vary from the normal, and handicapped students will once again receive what is deemed inappropriate for "normal" students at the very best and, at worst, not even considered at all. It appears that immediate attention and effort must be focused specifically on the special education students--and where they belong in the total career education concept. Since most of the ESCs throughout the state have state funding to develop model career education programs, it seems an additional staff person needs to be added to the ESC career education group in the interest of the special education student.

RECOMMENDATION: *That special education funds one position for career education development in each ESC, such a staff person to be vocationally qualified and included in the total staff involved with the career education model.*

Program Developers

The ESC Phase I staff are in an excellent position to assist the local schools in developing programs for the handicapped and to act as a communication catalyst. The ESC could be instrumental in breaking down the communication barrier by having meetings for local district special education

and vocational directors together (splitting their region in half and having two meetings, if the region is large).

Such a meeting, or series of meetings, should be supported through TEA funding--jointly special education and vocational education.

RECOMMENDATION: *That the ESC sponsor workshop meetings, through TEA support--to be jointly attended by vocational and special education directors (1) for the purpose of open communication between the two groups and (2) to be used for planning vocational programs for the handicapped.*

Section 4

For State Schools/State Hospitals

Age Restrictions

Probably the greatest frustration to operators of pilot vocational programs in state schools and state hospitals has been the maximum age limit of 21 for participating students imposed on the program. Individuals in these institutions who are over 21 have received no direct benefit from the vocational programs, yet many have the capacity and potential for vocational training. These individuals may well be the most successful candidates for job training and placement because of their maturity.

RECOMMENDATION: *That the policy which set the upper age limit for participation in VEH programs at 21 years of age be examined and modified for the State School/State Hospital programs to enable any*

resident with vocational capacity, 16 and older, to participate in the program. It would be preferable not to set a maximum age limit, but rather be guided by the feasibility of employment after training (which would effectively set the maximum at about 55 or 60 years).

Future Vocational Funding

Apparently if the state institutions were authorized to receive funds through the State Minimum Foundation Allocation, VEH funds would not be necessary for current program continuation. There seems to be no question as to the educational needs of the residents in the state institutions. State funding through M.F.A. would offer the resources to meet the need and free VEH funds to be used for new programs which may need to be developed for youthful drug abusers in state hospitals.

RECOMMENDATION: That strong support be given MH/MR's request for State Minimum Foundation Allocation funding.

Changing State School Population

The State Schools for the Retarded are undergoing a population change as the EMR residents are moved out, in keeping with the state's emphasis. The remaining residents and incoming residents will be of lower ability most in the TMR (or below) category. Vocational training for the remaining group may, of necessity, have a goal other than competitive employment which may not be realistic for the group with whom the schools will be working. The training emphasis could well be to train residents, who will be likely to remain in the institution, to become capable of work in the

institution itself. If this becomes the goal, some consideration should be given by MH/MR to develop the necessary machinery (state job category designation, minimum requirements, etc.) and resources to pay a small salary to residents who complete vocational training and can function on a job within the institution. The working residents, in turn, would be expected to pay the institution for their maintenance at a prearranged rate or percentage of their salary. There might also be discussion, among the sister institutions, about exchanging trained residents for employment purposes--this might be an incentive to the resident.

Also, other state schools should be encouraged to develop paid contract work in the community for their residents who could function in a small group with a job supervisor (from the school) working with them at all times.

RECOMMENDATION: *That it be recognized that competitive employment may not be the only goal of vocational training in a state school for retarded, and the MH/MR administration work with the school personnel to develop viable, alternative paid work opportunities for students who complete vocational training. The alternative work opportunities should be investigated and documented before additional vocational training is initiated in these schools to insure its responsiveness to local possibilities for protected employment.*

CHAPTER IV

REVIEW OF OTHER STATES' APPROACHES AND PROGRAMS

Information on other states' use of the designated 10% money for vocational education of handicapped (VEH) was obtained from four sources:

1. Letters to all states and Puerto Rico requesting specific information,
2. Visits to eleven state offices of education and thirty-two program sites,
3. Program visitations in two additional states, and
4. Review of current literature.

State information was obtained from 33 states and Puerto Rico (see Chart 6), either through their response to the mailed request (28 states and Puerto Rico) or personal visits to the state offices (5 states*). Information received from 6 states'** written responses was augmented through personal visits to the state offices. Visits were made to local programs in two states (Detroit, Michigan and St. Louis, Missouri) in which state offices of education were not interviewed. Programs in thirty-one secondary school settings and one community college were observed through personal visits.

The information gathered, while extremely helpful in identifying varied state and program approaches being used throughout the country,

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*Florida, Illinois, Massachusetts, Minnesota and Pennsylvania.

**California, Colorado, Georgia, New York, Ohio and Washington.

must be recognized as limited. Due to time constraints, state level information obtained through visits generally reflected the perception of one state education official (usually a Special Needs Consultant). Also, the few programs visited within each state were the outstanding ones--not representative (nor implied to be) of all programs within the state. For these reasons, no attempt is made either to present a comprehensive overview of any one state, or to compare other states to that of Texas or to each other.

From the information obtained primarily through written response from participating states, certain generalizations can be made:

1. Many states have been late in getting vocational programs for the handicapped in operation.

2. Most states either had more "set-aside" funds available than requests from local districts* or decided to fund requests on a "first-come, first-served" basis. Because of this, there has been little need for a priority system for funding purposes.

3. Most states' programs are working with 14 year old and older students.

4. Most programs operating are those which developed separate vocational training for the handicapped.

5. The largest handicapped group being served in most states in the VEH programs is the Educable Mentally Retarded (EMRs). The EMRs comprise the largest majority of handicapped students throughout the country.

*A contributing factor to local districts' hesitancy in submitting proposals is the non-continuous nature of the VEH program funding. Many states fully fund programs for the first year only and reduce the proportion of funding with succeeding program years.

6. All but two states (California and Illinois) are disbursing the special money through funding proposals which meet basic guidelines developed within each state's needs.

7. Twenty-four states have the same person or staff in the same division responsible for disadvantaged and handicapped programs.

8. Only six states indicate they directly fund private, non-profit agencies from the set-aside money.

None of the states visited felt that the vocational programs for handicapped students were fully meeting the need, and most felt the present programs were, at best, a starting point on which to expand. Many state people and local program people contacted voiced the same concerns as heard in Texas: how to integrate handicapped students into regular vocational programs; how to better relate and coordinate the academic and vocational experiences of the student; how to accomplish better communication among the involved disciplines; and how to obtain local school administration commitment to improve programs for the handicapped.

Most of the states visited are summarized below regarding their method of dispersal of the 10 percent VEH money, the program emphasis in the state, and unique features of their approach.

Florida

This state has single county school districts (67) and 28 community colleges, 13 of which have departments designated as area vocational technical centers located in five geographical planning areas. Proposals for VEH funding are initiated at the local level and involve the local coordinating council (special education, vocational education and vocational rehabilitation)

who agree to the proposal (and sign it, accordingly) before it is sent to the Area Regional Council. The proposal is reviewed at the regional level and then sent to the state Vocational Coordinating Committee and to the State Council for the Education and Rehabilitation of the Handicapped for further review and recommendation. Most of the VEH programs funded to date have been separate vocational programs, although one vocational evaluation program was funded in Pineallas County and a unique planning-action team approach was funded in Dade County (see Unusual Program section).

Ohio

The state of Ohio distributed its VEH funds through proposal submission from the LEA; currently having 68 projects funded throughout the state, serving 7,483 persons. Proposals are reviewed by a selected nine-member review committee (consisting of outstanding educators and leaders in the field appointed for one year only) for educational significance and proposal design. Each review committee member evaluates each proposal on designated points (program significance, objectives, procedures, economic feasibility, etc.) using the same form which has a numerical range for "Excellent," "Good," "Average," and "Fair to Poor," as well as room for general comments. The numerical ratings for each point covered on the evaluation form is added to obtain one total figure. The total number from each member's evaluation on the same proposal is compiled, then averaged to obtain a composite numerical evaluation rating as well as a composite summary of reactions to the individual proposals. The Director

of Vocational Education and his professional staff also review and rank each proposal in relation to the local school district's priority index (determined by six specific criteria comparing the local area's manpower needs and resource to the total state) as well as reviewing it for other specified information. The Director's Special Needs Service professional staff negotiates with LEAs to finalize worthy proposals for a current fiscal year.

Programs operating in Ohio represent a wide range of specific vocational skills and vary from providing separate vocational classes for the handicapped to integrating students into regular vocational classes.

Washington

Washington state also disperses VEH funds on the basis of local proposal requests. There are 14 programs presently in operation (in 13 districts), primarily geared toward separate vocational classes for handicapped students. Before a local district submits a total project proposal, it is encouraged to submit a brief letter of intent for tentative approval. The state has developed a two page form letter which requires the signatures of the Special Education Director, the Vocational Education Director and the District Superintendent. In addition, the form requests brief information as to number of students, probable cost, specific objectives, methodology (limited to 50 words), a check list description of special services to be provided to students and an evaluative design. If the letter of intent indicates a well thought out approach, a proposal is encouraged. Special ad hoc committees review total proposals and make recommendations regarding approval to the

Vocational Education Department (Office of the Superintendent of Public Instruction).

California

In this state, VEH funds are not disbursed throughout the state on a project request basis, but rather on a program of eligibility and entitlement for each school district in the state. Each district shows in its total vocational plan how at least 10% of its money will be spent in programs for the handicapped rather than developing a separate plan. Some of the districts in the state have turned back to the state vocational education division the 10% money, but the majority have utilized the money in their total program approach. On a statewide basis California has been bringing emphasis to bear upon secondary programs for all handicapped students, and it is the overall program goal to prepare each individual leaving the high school structure to enter and succeed in the next step toward completion of a career (junior college, vocational or trade school, on-the-job training program, etc.). The state approach, therefore, is more a "career preparation" one than a vocational education approach. The state has developed a five year master training plan which has identified ten geographic areas and key school districts within each area. The in-service training is concentrated on the key districts, initially, with the goal being to have the trained personnel in those districts capable not only of establishing operational programs for the handicapped, but also of training staff in surrounding districts.

Georgia

This state is combining the "set-aside" funds for disadvantaged and handicapped and disbursing money through supplemental grants for vocational education (the limit on which was recently raised from $20,000 to $40,000 for secondary schools with more than 1,000 students enrolled). Grants are made to individual schools rather than to districts. On a statewide basis, Georgia is placing increasing emphasis on vocational training opportunities for all students in the state, and the supplemental grant concept is in keeping with the state's aim to redirect the vocational offerings in every school to meet the needs of all students.

Proposals are submitted by a school system (limited to one school) and must contain a signed statement of agreement showing services to be performed by vocational education, special education and vocational rehabilitation in addition to meeting ten other stated criteria.

New York

The special vocational money is only granted to the six major cities (Big Six) or to area BOCES (Board of Cooperative Educational Services) for shared service among component districts. Individual school districts covered by a BOCES (all districts with the exception of the six major cities over 125,000 population) are not given direct funding from the VEH money due to the advantages of the shared service concept. The BOCES or the Big Six cities submit program proposals to the state, and priority for funding is based on conformance to needs identified in both the state and

regional plans for occupational education. Some BOCES have multiple programs funded, while others have none. In FY 1971, eighteen projects were funded to eight BOCES with one of the BOCES receiving funding for nine programs (Nassau County - see Section on Unusual Programs). Additional programs have been funded for the current (1971-72) school year. With other money, New York state has developed (and is continually refining) computer-based Resource Units, available in print-out form, to teachers throughout the state who indicate the specific subject areas in which they want resource materials and suggested learning activities. The potential for career education and greater interfacing between special education and vocational education is unlimited.

Massachusetts

Massachusetts funds the special vocational money based on proposals from any of the following sources:

1. Area and/or Regional Vocational-Technical High Schools.
2. Comprehensive Public School Systems (includes community colleges, state colleges and universities).
3. State Institutions for the Handicapped.
4. Non-Profit Agencies for the Handicapped.

The state has 42 projects funded this year (1971-72), approximately one-third of them operated by non-profit agencies. It is interesting to note that 132 proposals have been submitted for consideration for the coming fiscal year (1972-73). Massachusetts is one of the few, if not the only state to have an Office of the Handicapped (administratively under the

Bureau of Special Needs, Division of Occupational Education) with ten well-defined functions. Some of these functions include research on issues which affect the handicapped, establishment of seven regional task forces of industry representatives, development of a comprehensive occupational curriculum guide for each of the major handicapped population, development of a career development model for the handicapped from kindergarten to senior citizen, and interagency agreements with the major public, human service and economic agencies.

Pennsylvania

This state has tried several methods to distribute the VEH money. The first year, money was disbursed in the same manner as California's method, with each school district applying 10% of its vocational funds to programs for the handicapped. The second year, the set-aside money was divided among the 84 Regional Area Planning Units throughout the state. For the third year, it was determined that proposal submission would be a more workable method for distribution of the VEH money, and proposal guidelines were developed accordingly. In October, 1971, six one-day workshops were held throughout the state by a State Consultant for Programs for the Handicapped and Disadvantaged and a State Special Education liaison person. The workshops were attended by both vocational directors and special education directors and were for the purpose of planning proposals cooperatively for submission to the state office.

The state gives the same priority to proposals as priorities outlined by the federal government:

1st priority - programs which support handicapped students enrolled in regular vocational programs.

2nd priority - modification of regular vocational programs to enhance success of handicapped students.

3rd priority - special vocational program solely for handicapped students.

Minnesota

This state seems to have the strongest cooperative relationship among the three involved disciplines (vocational education, special education and vocational rehabilitation) as any in the country. The state's guidelines were written and signed by representatives of all their disciplines and provide excerpts from various laws, regulations and policies relating to services for the handicapped which affect all three Department of Education agencies. Further, the guidelines clarify the role and responsibility of each of the three involved agencies and stress interagency cooperation in planning, operating and evaluating vocational programs for the handicapped. Perhaps it is significant that the salary of one of the state Staff Consultant's in the Special Needs Program, Vocational-Technical Division, is paid by Special Education although he is assigned on a full-time basis to the State Department of Vocational Education. Further evidence of the cooperation is the many Vocational Rehabilitation Counselors housed in local high schools and serving as counselors in handicapped programs.

State VEH money is disbursed through proposal requests, reviewed at the state level by all three involved education divisions and evaluated against guideline criteria and use of community resources.

The state has been "selling" local educational administrators on the concept of vocational education for handicapped for almost four years. It is felt the state has many innovative programs because the groundwork had been laid in advance and because of the cooperative planning efforts of the involved disciplines.

Illinois

This state expends a small percentage of its VEH money through proposal requests as a high percentage of all handicapped students in vocational education are found in the cooperative work-study programs. These programs are jointly funded and supervised by the Division of Vocational Rehabilitation, the Department of Special Education and the Division of Vocational and Technical Education. The cooperative programs generally do not include skill training in a class setting--rather they rely on the work experience aspects for training. VEH money is disbursed by the state to all school districts which, in their one-year and five-year projected plans, include a description of how disadvantaged and handicapped students are identified and of ancillary services to be provided to integrate special students into the educational mainstream. Another page of the plan itemizes the program to be provided. All state funding to public schools is based on a unit of credit system. For classes which include handicapped students, the district receives a

"bonus," up to a 40% increase on the base amount, for the unit of credit. This method of funding served to provide an incentive to the local schools for integration of handicapped students into regular vocational education. There has been extensive participation in utilization of this incentive for integration of minimally handicapped students--primarily those with physical handicaps.

State VEH money has also been utilized, through contracts, to develop curriculum materials for related research and to support training programs in other agencies such as the Department of Mental Health, Division of Services for Crippled Children, and the Department of Corrections.

The State of Illinois is funding a research project for FY 1973 to study and evaluate its method of dispersing VEH funds, their impact and possible need for change. The state estimates a higher percentage of the total handicapped monies will be dispersed via contracts in FY 1973 than was contracted for FY 1972.

Unusual Programs

The programs summarized in this section are those which had unique approaches. It is not known whether they will have more effective results than the more traditional programs, but each is included for its difference and because the program, or a component of the program, addresses itself to one of the common problem areas with which most states are concerned.

Florida - Dade County (Miami)

Funded in the fall of 1970, this program was the first phase (planning-action) in implementation of a countywide vocational program for the handicapped, utilizing three, 3-member teams (each team consisting of a vocational counselor, a vocational teacher and a special education teacher). After a brief orientation period, each team was assigned to a different comprehensive high school and two feeder junior high schools. Under the direction of a coordinator who is dually certified in vocational education and special education, the team members operated as a group the first year--accepting referrals from school personnel, screening and testing referees, observing students in work and social situations, reviewing cumulative record folders, counseling individually and in groups, and making recommendations relative to vocational planning and training. A vocational rehabilitation counselor was an ad hoc team member and met with the team on a regular basis. The second year, the team members had learned enough about each discipline that they could begin to operate independently, each member was then assigned to one of the three comprehensive high schools and to all the feeder junior high schools. (This brought the schools involved to a total of 29 schools serving 600 handicapped students.) They now meet weekly as a team, still utilizing a vocational rehabilitation counselor as an ad hoc member to assure one year advance planning for rehabilitation services on each student.

The teams have vocational teacher aides (one or two) assigned to them to schedule throughout the day in regular vocational classes where there are handicapped students participating. Each team develops vocational

teaching materials for special education and vocational education teachers with whom they are working, in addition to developing employer contacts for specialized training. One team isolated and photographed 29 steps in making a sawhorse--to be used both as a work sample and as a teaching aid through the developed vocabulary list. There is a healthy competition among the teams to develop the "best" resources for the students--one team is working with a local employer to establish a training class for concession employment, another is working with a large food chain to establish training in short-order cooking.

The third year program (1972-73) plans to continue the team member's functioning individually (except for staffing of students), will increase the number of teacher aides and assistants to twenty, and will add teachers in the following areas: diversified mechanics (2), vocational agriculture (2), health services occupations (2 nurses), service state operator (1), office career (1) and orientation to the world of work (2).

Washington - South Bend Public Schools - "Greentree Project"

This unique project was funded in the fall of 1971 for short term training (ending in mid-April, 1972) and represents a cooperative relationship between private industry and public education. South Bend is located in mountainous rural Washington State, far removed from the major urban areas. The project was designed to teach handicapped (EMR) young men commercial tree planting with predetermined standards set by industry as to quantity (minimum of 650 trees planted per day) and quality (at least 95% acceptable on all types of planting terrain). An agreement was signed

with the Weyerhaeuser Company (one of the largest timber companies in the world) to plant 1,000 acres with seedling trees and called for payment (from the company) averaging $53.00 per 1,000 trees. That amount was supplemented with a 3% bonus if 95% or more of the trees met the quality standard as determined by the company auditor. (The Greentree Project never fell below the 95% and averaged better than 99%!)

Ten trainees were selected from secondary special education programs in three school districts which were located in tree farm areas (for a total of 34 trainees). Each group of ten students was in training for about 21 working days. (Students lived together in a residential setting Monday through Friday in a bunkhouse leased from the State Department of Natural Resources and returned to their homes on weekends. Transportation from the housing site to the planting location was provided by the school. The housing costs, including meals and recreation, were equally shared by the trainees from their earnings.) Since the tree planting season is from late November to mid April, four training cycles were involved, the fourth cycle made up of trainees selected from the first three groups based on the individual's potential. Thirty-three trainees completed the program, and seventeen were offered employment as tree planters with the Weyerhaeuser Company and/or the State Department of Natural Resources.

During this first program year, almost half a million trees were planted, earning the trainees gross wages of $16,654 (about $4,164 per group--$411 per trainee). Residential living costs averaged $73 per student for the 21-day training period.

California - San Juan Unified District

This district covers about 75 square miles in a suburban area with few vocational programs. There are eleven high schools in the district, eight of which have special education units. The district has an active work-study program and has just received delivery on the first of three specially designed mobile vans (funded through state VEH) to be used for vocational training of handicapped students throughout the district (home maintenance, homemaking, and small engine and small appliance repair). The first van is for home maintenance, and within it are well designed areas for plumbing, electrical and carpentry exposure. It has good lighting, central heat and air conditioning and is well constructed for a cost of less than $8,500. It is planned to rotate the units at regular intervals among the high schools.

California - Fullerton Union High School District

"Project Worker" is an ESEA Title VI work-study program utilizing video tapes ingeniously as a teaching tool and as a "selling" tool for employers. The purpose of the project is to train students according to the employer's needs, first video taping jobs in industry showing work performed in great detail. The video tape reels are edited, narrated and distributed to special education classes at eight campus locations throughout the district.

A full-time educational television technician works in the district's well-equipped television studio under the direction of the work-study coordinator.

Three basic types of video tapes currently in use are:

1. Job Overview Tape - used for career exposure and counseling.
2. Skill Development Tape - a teaching machine method employing programmed "flash card" technique.
3. Skill Application Tape - step-by-step instruction, how-to-do the job.

A mock-up or simulation of the actual work station is created at the school, providing the opportunity for the student to apply what he sees and hears on the video tape to what he will be required to do on the job. When the student has become proficient on the mock-up, a video tape is taken of his performance on the job which is shown to the employer who can compare it with the original tape of the "normal" employee. The students operate small video tape receivers and can work independently at their own pace. The district is incorporating the training tapes into a vocational skills library for use throughout the district as well as for other districts in the state.

California - Grossmont Union High School District

A unique feature of this school district is its operation of a large sheltered workshop which operates daily with about 175 students participating from all over the district (approximately 65 TMRs, 35 EMRs, 15 cerebral palsied students and 60 adult retardates). Staff includes a full time person for contract procurement from industry. The workshop offers a variety of job experiences, ranging from simple to complex, and each student progresses at his own rate to more difficult tasks. Participants

receive a token incentive payment (ranging from 5¢ to 50¢ per hour), based on weekly staff evaluations of each individual's work habits and work attitudes. The payroll is prepared by the EMR students and is paid in cash. The industrial contracts support all student payment, and any excess money at the end of the school year is used to provide for independent living experiences in commercial facilities within the community. Ratio of staff to students is one to five (paraprofessionals are used in addition to certified professional personnel). Board approval was recently obtained for the district to construct a new 20,000 square foot workshop facility which should be operational by early June, 1973.

Massachusetts - Lawrence School Center, Framingham
South Middlesex Regional Vocational Technical School District

The Lawrence School Center is a special vocationally oriented center for trainable mentally retarded students, ages 16 to 25. Students are referred from schools to 17 towns in the surrounding areas. The Center provides a broad, comprehensive program of coordinated services directed toward the physical, mental, social and vocational adjustment of each student specifically geared toward acceptabel behavior for permanent job placement.

Four job training units (set up as realistic models of industry) are in operation, each supervised by a vocational educator, in the areas of Food Service, Motel-Hotel, Nursing Supportive Services, and Building Maintenance and Groundkeeping. Students have an initial vocational assessmetn period of 8 to 24 weeks, during which time they participate in all

four training units. At the end of this phase, a staff conference is held to discuss all information on the student, and a decision is made as to which of the four vocational areas he will "specialize" in. Functional academic classes are an on-going program service on an "as needed" basis in addition to continual personal and social adjustment training and job orientation training. The student is provided specific job training with an emphasis on the utilization of community based job sites as classrooms. As the student approaches a condition of job readiness an appropriate job is located, and the student still participates in all services of the Center. The final phase is placement in competitive employment, and follow-up is maintained for a minimum of one year. The program is small (involving about 55 students) and the staff highly optimistic about the capabilities of the TMRs. The initial experiences of this program show impressive success percentages.

Massachusetts - Blue Hills Regional Technical School

Three programs for handicapped students are in operation within this regional vocational school, one in its first year, one in the second year and one in the third year of operation.

Training for the Deaf - This program is completing its third year and works with hearing impaired students throughout the regular school day. Two professional staff trained in the education and rehabilitation of the deaf work closely with twelve students; eight of whom are academically integrated

into the school and four of whom are integrated into technical classes only.

Exploratory Project for Educable Mentally Retarded - Completing its second operational year, this program is working with 25 EMR students transported from their home school to utilize the classrooms and the equipment of the Blue Hills Technical School after the regular students have left (the EMR vocational classes are daily from 3:00 - 5:00 P.M.) for both pre-vocational exposure and vocational training. The regular vocational teachers are used during these hours in five occupational areas: auto body, auto mechanics, metal fabrication, building services and structural woodworking. Fourteen additional students are in a similar program at another school in areas of food service and health assistants.

Program for Physically Impaired - Completing its first year, this program is teaching Electronic Technology to students from the Massachusetts Hospital School for Crippled Children. As in the program for the EMRs, these students are transported to Blue Hills daily to utilize the school's electronic equipment from 3:00 to 5:00 P.M. in classes taught by the regular vocational teacher. The training is in technology or data processing, covering radio and TV communications, industrial electronics, key punch and computer operation.

Pennsylvania - York County Vocational-Technical School

This program was originally developed for disadvantaged students who account for about 35% of the enrollment; a total of 125 students are participating. Students attend special academic classes for two weeks (taught by one CORE teacher who is responsible for all academics in a self-contained classroom), then two weeks in their chosen shop area where they are integrated with regular students. Students in this program participate in regular group guidance sessions and are visited in their respective vocational shops frequently by the program director. Constant communication is maintained among the vocational teachers and the program director to insure that student deficiencies are identified so that remedial activities will relate to the vocational training. Field visits are a regular part of the flexible program. Initial statistics indicate greatly improved attendance of participating students, particularly seniors, a low dropout rate and promising placement rates.

Pennsylvania - Eastern Northampton County Vocational Technical School

The special program involving about 85 EMRs at this modern technical school is ending its first program year. Regular students attending this school are bused in from throughout the eastern half of the county for half-day vocational training, returning to their local schools for academic classes. Special education students are selected from the county and remain at this school the entire day. As there was no available classroom space for this newly developed program, administrators managed to obtain

four new temporary buildings and attached them to the school. The special education students have vocationally related academics in self-contained units as well as pre-vocational exploratory activities for half days, and many of them are in regular vocational classes the other half day. Communication between the special education teachers and regular vocational teachers is excellent, primarily due to the program flexibility and proximity of vocational and special education teachers. The teachers' lunch period is usually devoted to discussions regarding particular students they have in common.

There is a work-experience component included in the program. All involved with the program have been pleased with the first year experiences and will expand to 120 students next year.

Minnesota - Work Adjustment Center (WAC) Technical Education Center - Anoka, Minnesota

The program is designed to assist handicapped students prepare for competitive employment. The WAC facility (15,000 square feet) was planned and implemented with the inception of this area vocational school. Eighty students were involved in the WAC during the regular school year (50% EMR, 40% emotionally disturbed, 10% physically handicapped) in both vocational evaluation and basic training in one of the following areas: assembly, basic machine operation, building maintenance, clinical food preparation, inventory control, laundry, service station, warehousing, woodworking, nurses aide, and job seeking. The student goes through an evaluation

period (usually four weeks) where his aptitudes and skills are determined. He then has several options available depending on the vocational plan: enter training in one of the offered areas, seek full-time employment, or enter regular vocational classes.

Vocational evaluation is a continuous process, and, if the student demonstrates ability in one or more specific areas while in the WAC basic training unit, he may be enrolled in regular vocational classes. The areas and length of training within the WAC are flexible and are determined by a person's readiness to enter employment or additional training.

Curriculum - The occupational areas were determined by the feasibility and past experience of finding employment for the handicapped, particularly the mentally retarded because such a large percentage of students fall into this category. The curriculum is geared not only to skill training, but to health, safety and grooming, plus good social attitudes toward fellow employees and employers. Consideration is also given to the development of a vocabulary peculiar to the chosen occupation. Academic work is kept to a minimum within the WAC. If a student needs additional work in reading or math for his vocational area, he is referred to a resource room. The WAC teaching concept is based primarily on experiences. Students learn about the need for cooperation by working on an assembly line. They learn about job pressures by experiencing time limits for tasks. Students in the laundry area learned something about following directions and responsibility when the school football uniforms came out pink after they were washed with

red sweatshirts! Students who were unrealistic initially found by trial and error what they could and could not do. (Students try their choice of occupational areas first).

Evaluation - Weekly evaluations are done on each student as well as periodic case conferences. Since Work Evaluators are assigned to specific skill areas, each student usually works with at least three different evaluators. The Coordinator felt the input from the different members of the staff produced a more accurate student evaluation than one in which one Work Evaluator followed a student through the entire program. Their supposition is that a Work Evaluator cannot reach every student and that it is also important to find out how a student reacts to different personalities on the staff.

Staff's Feelings About the Program - The staff seemed very proud of their program. They felt that they were meeting the needs of handicapped persons because they took the students at their particular level and worked from there. They emphasized that they didn't take just the cream of the crop. Only those persons they felt needed hospitalization were rejected. The large workshop with curriculum emphasis on experience rather than academics was considered very important. Communication and coordination is maintained between the WAC staff and the teachers in the regular school. Effort is made to gear reading, math, spelling, etc., to the student's particular vocational area. The degree to which the materials are coordinated depends almost entirely on the special resource teachers. The WAC

staff and program's relationship to the facility was also considered a strength. Last year 28% of the WAC students entered the regular vocational programs, and it is anticipated that this year it will be 40%. If these same students had applied directly, it is estimated that only 2 to 5% would have been accepted.

The WAC has also been instrumental in changing some of the regular vocational programs. For example, there are now three levels in machine shop instead of one, and auto mechanics is divided into major and minor repairs. When a student graduates he receives a certification of stated skills rather than a diploma.

The staff emphasis is on recognition of the individual differences and needs of each student, and they evidence the confidence and ability to structure a program to meet these needs.

New York - Nassau County BOCES (Board of Cooperative Education Services)

A BOCES is an area public school agency, created to enable local school districts to pool their resources to conduct educational programs and provide services that the local school districts could not do economically or efficiently on its own. This BOCES covers an area on Long Island with 56 school districts. Within this area are five regional Occupational Education Area Centers which the BOCES administers.

This innovative group has received a number of VEH grants from the state and has numerous programs operating for the handicapped at five different school locations. While many of the skill training programs are

separate classes, the BOCES has successfully integrated Emotionally Disturbed students into one of the five occupational education centers (area vocational school). The long-range planning includes integrating more handicapped students into the area vocational schools gradually. A brief description of program highlights at four of the schools follows:

Beechwood School - A special school for brain injured and health handicapped students. Occupational Awareness Programs are designed for those ages five through ten and are broad based in nature, representative of a cluster of ongoing occupations. The activities conducted are planned to bring awareness and understanding of the world of work at large to the enrollees. Students involved in these laboratories spend three-quarters of an hour per day, five days a week in small groups. The remainder of the day is spent in a specialized academic setting. By the time students have grown from age five to ten, they will have moved through areas of experience in each awareness laboratory.

Preoccupational Programs for those ten through fifteen years of age are exploration settings designed to provide a series of experiences geared to assisting the student in terms of occupational selection for advanced training. The staff, made up of occupational teachers, curriculum specialists, vocational counselors and psychologists observe each student's progress and maintain an "occupation potentials" file on each enrollee. Preoccupational areas include: Health Services, Building Trades, Food Trades, Office Occupations, Management and Sales, Industrial Electricity, Horticulture and

Equipment Repairs, Food Service, and Audio-Visual and Graphic.

Students participate in preoccupational programs on a rotational basis for three-quarters to one and one-half hours per day, five days a week depending on age. The remainder of the day is spent in a regular academic setting.

Students 15 years of age and older may elect additional occupational training at either the Career Development Center or one of the several Occupational Education Area Centers, dependent on selection and potential.

Career Development Center - Programs conducted for the emotionally disturbed population, ages 15-21 are designed to provide training for entry level employment positions. All enrollees in the Career Development Center (formerly called the Service Occupations School) participate in Occupational Educational Training for one-half of their school day, five days a week. The remaining half of each day is spent in a classroom setting where general related education is provided. Vocational cluster areas include: Automobile, Building Maintenance, Health and Office, Horticulture, Machining and Packaging (includes industrial electronics), Food and Clothing Services, and Graphics.

Greentree School - A special school for the emotionally disturbed, brain damaged and physically handicapped Occupational Awareness Programs and Preoccupational Programs are the same as those offered at Beechwood School. Preoccupational laboratories include: Small Engines, Building Mechanic, Horticulture, Machine and Electrical, Food Service, and Office and Sales.

The Special Services School - Special School for TMR students. This school is said to have the largest TMR student body in the United States (about 900 students; ages 5 to 21).

All programs are designed to provide skill training geared to production workshops with the potential of training for basic entry level employment for those capable.

The programs are designed as one-half day offerings, five days per week, while for the other half day the enrollees will be involved in basic education and attitudinal as well as behavioral adjustment classes.

The Occupational Programs are generally for those TMR youth ages 16 through 21 as well as selected 14 and 15 year olds. The programs to be offered include: Work Preparation Shop I and Shop II, Food Handling, Horticulture Occupations, Building Maintenance, Ceramic Workshop Manufacturing Skills, Distributive Education Operatives, Specialized Life Adjustment Training Laboratory.

Community College of Denver (Colorado) - Center for the Hearing Impaired

This center was opened in the fall of 1970 on the campus of the Community College and functions as an integral part of the entire school. Supportive services are provided deaf students in the areas of orientation, counseling, communication, tutoring and social skills. Presently, the program has students integrated into regular classes, with interpreters, and students participate in all college social and club activities, seminars and other events. The Center conducts regular training classes

for regular students to learn signing--both for employment as interpreters and because of the high level of interest generated to learn to communicate with hearing impaired students. The Center utilizes a total communication approach, using all available media, including the S.E.E. (Seeing Essential English) system of signing English. The center staff maintains close communication with all teachers and other college staff, including the dormitory personnel. The college does not "screen out" students and has virtually no entrance requirements. The center plans to expand to provide comprehensive services to all types of handicapped students and will open such a center when the West Campus (on the opposite side of the city) becomes operational.

STATISTICAL CHARTS

CHART 1

STATUS OF PILOT VOCATIONAL PROGRAMS
FOR HANDICAPPED IN TEXAS

School year 1971-1972 (as of 12/71)	educational entity	#	TEAs $ allocated	% of total
	ISD	79	1,476,287	56.6
	SS/SH	15	586,872	22.5
	ESCs	16	466,577	17.9
	Jr. Colleges	5	79,903	3.0
	Total	115	$2,609,639	100.0%

CHART 2

TEXAS I.S.D. PILOT PROGRAMS

(73 districts)
(missing 4 districts)*

Vocational Training Area	# of Districts Offering	Age Levels in Vocational Training											Total
		11	12	13	14	15	16	17	18	19	20	21	
Apparel Service	2	-	-	-	5	6	16	8	3	-	-	-	38
Bricklaying	1	-	-	-	-	3	4	5	3	1	-	-	16
BM&R	15	5	11	27	55	80	50	36	14	2	2	1	283
Electrician Helper	1	-	-	-	5	5	1	1	1	1	-	-	14
F&RM	3	-	-	4	10	9	8	8	7	-	-	1	47
FS	7	-	-	4	14	32	37	37	21	9	4	1	161**
Horticulture	3	-	4	7	5	7	9	4	2	-	-	-	38
CT	32	2	27	93	136	156	131	52	24	9	-	-	630
Laundry Service	1	-	-	-	4	11	5	4	3	3	-	-	30
Office Skills	2	-	-	1	5	6	5	7	1	-	-	-	25
Painting	2	-	-	12	13	16	10	2	1	-	-	1	55
Plastic Extrusion	2	-	-	-	12	14	8	5	2	-	-	-	41
S.S. Attendent	1	-	-	1	3	2	3	7	2	1	2	-	21
H&CS	43	3	14	116	161	166	137	81	49	6	7	2	742
Printing	2	-	-	-	3	3	8	-	1	1	-	-	16
G.M. Repair	19	1	7	39	43	75	83	47	18	5	3	-	321
TOTAL	136	11	63	304	474	591	515	304	152	38	18	4	2478**

*Brownwood, Hallsville, Judson and New Caney.
**Includes 2 not categorized.

Source: TEA Form VOC-066

CHART 2

SUMMARY

Ages	# Students	% to Total
11-13	378	15%
14-16	1580	64%
17-21	518	21%
	2476	

CHART 3

COMPOSITE ANSWERS FROM 14 ESCs

(Missing: Beaumont, Not Sent to El Paso)

TO BE FILLED OUT BY PUPIL APPRAISAL/VOCATIONAL EVALUATOR/PUPIL EVALUATION ESC PERSONNEL

Informational Questionnaire
Education Service Center--Phase I's

	(# Responses)	
# Student evaluations completed--1970-1971	12	1,695 no figure included for Richardson
# Student evaluations completed--1971-1972	14	2,166
How many evaluations were requested for 1971-1972?	12	1,971 - 2 responses missing
Average # hours spent in evaluative measures per student	14	Range 3 to 14 hrs. Average is 6½ hours

Time span of pupil testing: (mark appropriate line)

All in same day 2

two consecutive days 1

non-consecutive days ✓ How many? 2 days--3, 3-4 days--4, 5-7 days--1

other Consecutive 3 days--2

✓ 7 days--1

Do you test Spanish first language students in Spanish? Yes 3 No 10 partially--1

Are your vocational evaluation reports prescription or general? both--5; prescription--4; general--5;

Do you see the purpose of your testing to determine job placement areas for VAC's and/or Rehab. Counselors or to determine vocational training areas?

both--7; training--4; placement--3

Who, within the schools, obtains copies of your evaluation? How do they utilize the information contained in your reports? Referring teacher--13; Counselors--8; Principal--7; Special Ed. Director--7; VAC's--5; Vocational Director--3; Superintendent--2

What kinds of tests are you using (test names)?

Purdue Pegboard -- 6	Geist -- 4	WRAT -- 6
McDonald -- 2	Bennett -- 5	VISI -- 2
GATB -- 3	Crawford -- 3	Minnesota Rate of Manipulation - 7
Stromberg -- 2	WISC/WAIS -- 3	Minnesota Spatial Relation -- 5
Attitude Scale -- 1	PIAT -- 1	Pennsylvania Bi-Manual -- 5
Cattell -- 1	Kuder -- 1	Vocational Picture Interest Inv.-4
Brainard -- 1	Gordon Occupational - 1	Practical Dexterity -- 2
Wells Concrete -- 1	Oseretsky -- 1	Pitner General Abilities -- 1
Disc Assembly -- 1	Demos -- 1	Ohio Vocational -- 1
Tendler -- 1	Peabody -- 1	Minnesota Clerical -- 1
		Reading Free Vocational Inv. -- 2
		Culture Fair Intelligence -- 1

Indicate approximate percentages of the categories below:

	% to total tests used
paper-pencil tests	Range 5 to 50; Average 17
verbal tests	Range 0 to 35; Average 10
performance tests	Range 5 to 60; Average 37*
achievement tests	Range 0 to 15; Average 6
job sampling	Range 0 to 70; Average 24**
other	Multi-media; attitude survey; teacher rating; picture tests

How many miles is it (one way) to the most distant school with which you are working within your region? Range 47 to 156;Average 88 How many total sqare miles are in your region? Range 6,356 to 37,553;Average 15,791 How many independent school districts are in your region? Range 38 to 104; Average 62 With how many are you working? Range 1 to 44; Average 13

What advance information do you have on students prior to testing? School records - 6; Teacher information - 10; ESC referral form - 4; Psychological - 2

How many opinions contribute to the final recommendations in your vocational evaluation report? 1 -- 1; 2-3 -- 7; 4-7 -- 4

With what age student were the majority of your testing efforts? 14 -- 3; 14-15 -- 1; 15 up -- 1; 14-16 -- 4; 15-16 -- 2; 14-17 -- 1; 14-21 -- 1; 16-18 -- 1

What follow-up and further contact do you have with students after you have completed testing? Little or none -- 7; Some -- 4; Re-evaluation by request -- 1; Teacher visits -- 3; Regular annual retests -- 1

Please indicate approximate percentages of your total work time involved in the categories below:

travel time Range 5 to 30; Average 11

individual student testing Range 10 to 30; Average 19

group student testing Range 0 to 25; Average 10

orientation of teachers to program Range 1 to 7; Average 4

orientation of teachers toward vocational material Range 1 to 10; Average 6

working with schools to develop Phase II programs? Range 2 to 15; Average 5

test scoring Range 0 to 25; Average 6.5

test analysis Range 5 to 25; Average 10

test reports Range 5 to 25; Average 16

orientation of students to program Range 1 to 20; Average 5

orientation of students to vocational information Range 0 to 20; Average 6

other areas (please categorize)
Planning program & materials 2-5%, 2-10%
Other ESC work 1-5%; 1-10%;
Information to others 1-7%; Clerical tasks 1-10%; In-service 2-5%

What have been the greatest problem areas encountered in operating a Phase I program?
Students moving in and out of district before diagnosis is completed
Correlation to Phase 2 programs --- 2 responses

*6 report 45 or higher
**5 report 0; 5 report 30 or higher

Working with vocational education people in the local education agency getting release time to train school personnel

Scheduling student testing and students being available when expected

Lack of coordination between school program and Phase I

Not enough Phase I staff to work on school needs --- 4 responses

A feeling of frustration when apparent valid recommendations are not followed up by LEA

Not enough time to work with schools on Phase 2 programs

No funds for outside testing consultants or computer time

Orientation of teachers to program and use of vocational materials in class

Lack of information and communication in administration

Deficiency in teacher training

Conflicts between Special Education and Vocational Education guidelines

Vocational evaluations shelved because of non-existing vocational programs or non-existing training station

No major problems encountered

Poor attendance on handicapped students in a few schools caused a loss of time in ground orientation and testing.

Limited involvement of classroom teachers into program; Finding suitable test instruments

What recommendations do you have for making Phase I programs more effective?

Achieve better relationships with local vocational teachers in order to place students in existing regular vocational classes

Academic program should be correlated with vocational program and the recommendations from the vocational evaluations

ESCs should train LEA staff in vocational evaluation techniques and procedures--4 responses

More orientation emphasis; less strict skill evaluation--particularly for the younger students -- 2 responses

Vocational evaluation should be standard part of 14 year old special education student's evaluation -- 2 responses

Accelerated TEA information and dissemination to all levels

More Phase II programs -- 3 responses

More staff assigned to Phase I -- 3 responses

More orientation of teachers to programs, use of vocational materials toward world of work, and help developing career education for handicapped & disadvantaged

Classroom teachers should participate more in the programs -- 4 responses

# of pupil appraisal Personnel

Name-Region # of ESC

Name of person filling out report

CHART 4

PHASE II PROGRAMS IN STATE SCHOOLS/STATE HOSPITALS

STATE SCHOOLS

Type of Training	# Schools Offering This Type
H & CS	5
BM & R	3
Food Service	2
General Construction Trades	3
Service Station Attendant	1
Horticulture Related	3
General Mechanical Repair	2
Domestic Services-Custodial Services	2
Laundry	1
Hospital Services	1
Light Manufacturing	1
Commercial Art	1
Production Workshop	1
Electronic Assembly	1
Warewash	1

Number of units per state school:	1 unit only	1 unit M 1 unit F	2 units	3 or more
	3	3	1	3

STATE HOSPITALS

Office Occupations	1
General Metal Trades	1
Electronics Repair	1
Office Duplicating Practices	1
GCT	1
H & CS	1
FS	1

Number of units per state hospital:	1 unit only	1 unit M 1 unit F	3 or more
	2	1	1

CHART 5

1970-71 HIGH SCHOOL ADA IN TEXAS
SCHOOLS HAVING VOCATIONAL EDUCATION

Group Size	Number of Districts	Total H.S. ADA	% of Total ADA
10,000 through 20,000	7	179,747	26.5%
2,500 through 9,999	39	187,500	27.7%
900 through 2,499	75	119,250	17.6%
300 through 899	223	114,850	17.1%
50 through 299	493	73,525	10.9%
under 50	95	3,562	.53%
TOTAL	932	678,434	

Source: Summary of the Second Annual Report of the Advisory Council for Technical-Vocational Education in Texas; September, 1971.

CHART E
RESPONSES FROM OTHER STATES

	All States Replying	Handicapping Categories Served: EMR	TMR	Emotionally Disturbed	Learning Disability	Hearing Impaired	Visually Impaired	Speech Impaired	Crippled	Multi-handicaps & Others	Age	Junior High	Senior High	Separate Classes	Integrated	Funding Private Non-profit Agencies ?	State Office--Program Responsibility	
1	Alabama	53%	6%	11%	2%	9%	4%	1%	4%	9%	16 +	✓	✓	✓		?	Special Needs Coord - Vocational Ed	1
2	Arkansas	43%	26%	4%		24%	1%	1%	1%		14-53		✓	✓		Yes	Supt - Disadv & Handicapped	2
3	California											✓	✓	✓	✓	No	Special Ed - Coord of Program Devlmt	3
4	Colorado	most									16-21			✓		No	Special Ed - Program for Handicapped	4
5	Florida	primarily									14 up			✓		No	Special Vocational Program - Handi	5
6	Georgia										16 up				✓	No	Special Projects (Disadv & Handi)	6
7	Illinois										15 up			✓	✓	No	Disadvantaged & Handicapped	7
8	Indiana	90%				5%				5%	14 up	✓	✓	✓	✓	No	Disadvantaged & Handicapped	8
9	Kansas	most									16-20			✓		Yes	Special Needs	9
10	Massachusetts										16 up				✓	Yes	Special Needs - Office of Handicapped	10
11	Michigan	most		✓		✓	✓				16-25		✓	✓		No	Disadvantaged & Handicapped	11
12	Minnesota										14-21				✓	No	Special Needs	12
13	Mississippi	most					✓		✓		14-adult			✓		No	Special Needs	13
14	Missouri	50%	10%	35%		5%					11-45		✓	✓		No	Disadvantaged & Handicapped	14
15	Montana	45%		5%		15%	5%	10%	20%		14-62(most 15-18)		✓		✓	No	Special Needs	15
16	Nebraska	8%	25%	5%	40%	7%	3%	2%	4%	4%	7th-12th				✓	No	Special Needs	16
17	Nevada	19%	28%	12%		2%	1%	33%	3%	2%		✓	✓		✓	No	Special Programs	17
18	New Hampshire										14 up	✓	✓	✓		Yes	Disadvantaged & Handicapped	18
19	New Jersey	45%	17%	8%		19%					16-20		✓	✓	✓	No	Vocational Ed for the Handicapped	19
20	New York	✓	✓	✓				✓			14-21			✓		No	Disadvantaged & Handicapped	20
21	North Dakota	most												✓	✓	No	Special Needs	21
22	Ohio	79%	2%	2%		8%	5%	2%	2%		14 up		✓	mostly		Yes	Special Needs	22
23	Oklahoma	✓	✓	✓					✓		14-adult	✓		✓		No	Disadvantaged & Handicapped	23
24	Pennsylvania	primarily EMR									14 up				✓	No	Disadvantaged & Handicapped	24
25	Puerto Rico	66%		20%			8%		6%		12-21	✓		✓	✓	Yes	Vocational Education	25
26	South Carolina	88%	9%			3%					14-18	✓		✓		No	Special Programs	26
27	South Dakota	(one specific program for deaf)															Vocational Education	27
28	Utah										16 up		✓	✓	✓	No	Vocational Education	28
29	Virginia	1%		12%	12%	25%	17%	1%	24%	7%				✓		No	Special Services	29
30	Washington	60%								40%	14-19		✓	✓	✓	No	Disadvantaged & Handicapped	30
31	West Virginia	most				✓	✓				15-19			✓		No	Vocational Education	31
32	Wisconsin	80%				4%	16%						✓	✓	✓	No	Special Needs	32
33	Wyoming	most										✓	✓	✓		No	Vocational Education	33

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