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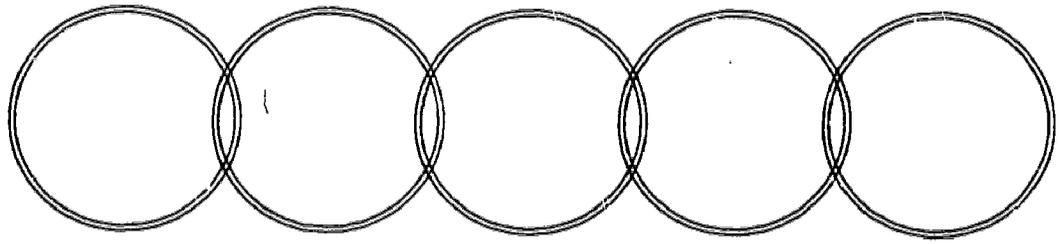
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ABSTRACT

Evaluated was a 2 year, five county vocational program for visually handicapped junior high, secondary, and junior college students designed to encourage skill development of the student and inservice training of the regular instructor. Evaluation was by means of two questionnaires to which 53 vocational educators, 62 nonvocational educators (teachers of the blind and administrators), and 65 student teachers and prospective teachers responded. Two of the six conclusions after analysis of the data are that partially sighted and blind students can be successfully integrated into regular programs and that regular vocational educators will enroll blind and partially sighted pupils if they receive inservice training. To further vocational education for the visually handicapped, project evaluators made nine recommendations of which the following four are examples: the replication of similar projects in other regions, the development of an itinerant inservice team at the state level, and the establishment of a clearing house at the state level for career and vocational materials for the handicapped. Appendixes include the two questionnaires used in the evaluation. For other program documents see EC 051 030 through EC 051 032. (DB)



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VOCATIONAL
SKILLS
TRAINING
FOR
THE
VISUALLY
HANDICAPPED

● evaluation document

EC 051 133E

Santa Cruz County Office of Education
Richard R. Fickel, Superintendent
701 Ocean Street Santa Cruz, California 95060

MAY 1972

ED 073580

A FIVE COUNTY
VOCATIONAL SKILLS TRAINING PROGRAM FOR THE BLIND

EVALUATION DOCUMENT

by

Dr. Gene H. Russell
Head Teacher
Vocational Skills Training Program

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THE SANTA CRUZ COUNTY
OFFICE OF EDUCATION
City of Santa Cruz, CA. 95060

DR. RICHARD R. FICKEL, SUPERINTENDENT
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FOREWORD

The Santa Cruz County Vocational Skills project for blind and partially sighted minors was authorized with the passing of S.B. 632 (Grunsky) in 1969. In concert with the County Superintendents of San Mateo, Santa Clara, San Benito, and Monterey Counties, a regional program of supplemental inservice and pupil instruction for vocational education teachers and blind and partially sighted pupils was described in a Vocational Education Act project proposal submitted to the State Department of Education November 26, 1969. In the project proposal document, the major thrust of the program was described as "meeting the unmet vocational education needs of visually handicapped pupils enrolled in junior high, secondary and community colleges in the five county region."

The program was first funded for the 1970-71 school year, and again for the 1971-72 school year. The vocational areas emphasized have been technical and industrial arts, home-making, and work experience. The project has also included an information dissemination component which has included over a dozen workshops throughout the State in conjunction with the Vocational Education Section of the Division of Special Education, State Department of Education.

Many Vocational Education Teachers who had previously not had the opportunity of working with visually handicapped students, through this program, have been trained in the skills required to broaden each child's vocational potential through the use of tools, appliances, equipment, and the development of skills associated with home-making and technical and industrial occupations.

The project staff has prepared a Curriculum Guide which will provide vocational education teachers throughout the State with specific guidelines demonstrating the techniques required for the instruction of the visually handicapped pupils in selected occupational courses.

RICHARD D. STRUCK, Director
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RDS/shp
4/11/72

PREFACE

The Santa Cruz County Board of Education and County Superintendent and Staff are committed to providing students, in terms of individual capability notwithstanding handicaps, the opportunities for vocational development which will prepare them to find their place in society as productive participating members.

The purpose of this exemplary project, Vocational Skills for the Blind and Partially Sighted, has been to provide vocational skill training and counseling to blind and partially sighted students in the five-county area of Monterey, San Benito, San Mateo, Santa Clara and Santa Cruz Counties.

An indication of the cooperative effort necessary to provide these services and experiences is the eagerness and participation of the superintendents, teachers and employees of the five counties together with state consultants and rehabilitation counselors. The efforts and results have been most rewarding.

RICHARD R. FICKEL, SUPERINTENDENT
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Santa Cruz, California

CHAPTER I

INTRODUCTION

"The beginning of organized work for the blind in America is usually set at 1828, the year in which the Massachusetts legislature passed a bill incorporating the New England Asylum for the Blind (Scott, 1969, p.122)." The doors of the Asylum (later called Perkins School for the Blind) opened to students in 1832, leading the way for other states to follow, and soon there were dozens of residential schools for the blind throughout the eastern part of the United States.

As students graduated from the schools for the blind, they encountered difficulty in securing employment. In efforts to remedy this problem, Scott states that:

. . . residential schools began to build their own workshops, in which they trained their graduates for industrial employment. Perkins opened a workshop in 1840; the New York Institute followed suit in 1845 (for example); . . . In addition, many other states that did not have residential schools began to support workshops and other special facilities for employing the blind (Scott, 1969, p.123).

The employment training in these workshops generally took an accommodative approach in the use of equipment specifically adapted for the blind worker. Work tasks, and even the entire method of production, were engineered with the disability in mind, so that there was little resemblance between an average commercial industrial setting and the workshop. Indeed, the blind worker acquired skills and methods of production that probably were unknown in most commercial industries (Scott, 1969, p.85).

In addition, the blind were subject to questionable personnel practices.

Jobs of a menial or repetitive nature were more often than not assigned to the blind worker. Little effort was made to exploit the capabilities of the blind (Myers, 1963, p.255).

As early as 1836, there were writings on the use of the hands of blind children. Johann Wilhelm Klein, one of the founding fathers of the education of the blind, wrote that the hands are of special importance to the blind child.

They must replace to a large extent his eyes and their neglect during childhood can later be made up only with difficulties, if at all . . . Therefore, it is urgently necessary to motivate the blind child as early as possible to make use of his hands. . . Furthermore, one should not be too afraid to let him use knives and other tools with his hands, just as soon as other children, of course with the necessary caution, and one should also let him cut, hammer, etc. (Diamond, 1971, p.234).

"Most tools and instruments which man has devised to make his activity easier and more efficient were developed with the idea that the user would have good eyesight (Thompson, 1963, p.237)." Thompson, a contemporary authority on skill development for blind veterans, states that because of the infinite number and variety of tools, instruments, and materials it is 1.) impossible for a blind person to handle most of them by normal means and 2.) not practical to make all of them in special ways for people who do not see. Therefore, changed techniques are required (Thompson, 1963, pp.237-238). This premise is also advocated by Richard R. Friend of the New Jersey State Commission for the Blind. Friend indicates that "A technique is transferrable from one set of circumstances to another, whereas a special device may not be (Friend, 1963, p.257)."

"It has long been the philosophy in California that blind youngsters should have the opportunity to participate in integrated instructional programs (Marsh and Friedman, 1972, p.426)." Johann Wilhelm Klein was convinced in 1845, that the only solution for the problem of providing education for all blind children was in their placement in local public schools when he wrote the following:

Only if the blind are educated and occupied within their own families and instructed in the schools of their home communities will it be possible to provide for all the blind a level of education that is suited to their circumstances (Diamond, 1971, p.239).

Blind students enrolled in public school programs receive their education from regular teachers but receive, in addition, supplementary teaching services which may include a full time special or resource teacher, special instructional materials and equipment, and counseling and guidance (Marsh and Friedman, 1972, p.426). It is currently estimated that in California, at least 90 percent of the blind and practically all of the children identified as partially seeing are educated with nonhandicapped children in the public schools (Misbach and Sweeney, 1970, p.v).

CHAPTER II

THE PROBLEM AND THE NEED

The Problem

Although it was possible to readily identify and formulate a rationale for a program of skills development for visually handicapped adolescents, little was known of the reaction to and/or the feasibility of such a program among educators. The scope of the problem can be more clearly understood when we realize that vocational education for the blind has traditionally consisted of chair caning, rug weaving, broom making, mop making and other outdated activities. With the identification of career education as the number one priority in education (National Advisory Council on Vocational Education, 1971, p.iii), skill development for the visually handicapped takes on new meaning and significance.

The Need

This study was undertaken to 1.) fulfill the project objective and goal pertaining to a research or evaluation document for which the project staff would be held accountable and 2.) answer specific questions raised prior to the activities of the project's third year of operation. These questions, see Appendix A, were raised to help start the project staff thinking in terms of project evaluation; the third year being the evaluation phase of the project.

CHAPTER III

METHOD OF PROCEDURE

The aim of this study was to ascertain the practicality and operability of a vocational skills training program for blind students in a five-county region. Two questionnaires were developed and employed to gain insight into the reaction to the concept by 1.) educators of the visually handicapped and 2.) instructors of vocational subjects. This chapter contains a description of the methods and procedures used in the development of an innovative skills training program for the visually impaired.

Possible Solutions

In the establishment of an exemplary or innovative endeavor, there is often times a burst of creative or intuitive energy resulting in new insight and thinking regarding an old problem. The proverbial problem of building a better mousetrap comes to mind, when, with some creative brainstorming and thinking, we might arrive at the superior idea of building a better mouse (Butler, 1971 p.1). Although this may appear to be far fetched, the numerous innovative curriculum projects in vocational education are an indication of the concerted efforts to improve a situation by concerned school districts, state departments of education and institutions of higher education.

In regards to the visually handicapped, new thinking and strategies were necessary to create the opportunities to allow blind and partially sighted students to be able to enroll and participate in career and vocational education activities. A variety of vocational classes have been available to sighted students in public schools since the turn of the century but generally denied to the normal students with vision problems.

The answer to the problem of vocational training for the visually impaired finally resolved into one of the following four alternatives:

(1) No skill development. This "technique" has been used with some success by both public and private agencies. The blind were encouraged and often subsidized to secure professional training because the agency "did not know what to do with the applicant and a four-, six-, or eight-year college stay was a device to avoid the problem at hand (Yoder, 1963, p.319)."

(2) Self-contained vocational class. In school districts, counties, or states where there are groups or sufficient numbers of visually handicapped students, the establishment of a self-contained vocational class could be considered. This arrangement allows four blind students to receive semi-individualized instruction from an instructor in a setting without other students present. Outside of state residential schools and the large verbal areas, this approach is not practical.

(3) Integrated program without assistance. This approach would have the visually handicapped student receiving vocational training in regular classrooms from regular industrial, homemaking, or business and distributive education teachers. "The education and training of visually handicapped children for employment must follow basically the same objectives and the same methods as do the modern occupational and vocational curricula for the sighted (Cadwalder, 1964, p.173)." Supplementary teaching services may be provided, when available, by a resource teacher who may even elect to "take the class" and learn along with the student. To succeed, the vocational education teachers would need training and experience in working with the blind and partially sighted.

(4) Integrated program with assistance. The creation of a program

that integrates the visually handicapped with sighted students can be facilitated when a trained skill specialist can be present to supplement the regular teachers instruction immediately after demonstration or presentation. A vocational skill specialist for the blind and partially sighted is usually trained in non-visual teaching techniques.

A survey of fifty-one industrial arts teachers, conducted by Butler in 1968, with teachers selected at random from the counties of Monterey, San Benito, San Mateo, Santa Clara and Santa Cruz, found that only one had ever taught a blind student in any industrial arts classes. To the question "Would you take a totally blind student into your general shop?" it was found that only fourteen (14) answered, "Yes", while twelve (12) didn't answer the question at all.

From the findings of this survey, it was concluded that 1.) blind students were not then participating in industrial and vocational classes at the high school level in the five-county region, 2.) industrial and vocational educators would, more than likely, allow a visually handicapped student who expressed a real desire in the subject area into their classes on at least a trial basis, and 3.) trained skill specialists could alleviate or at least reduce many of the fears and attitudinal problems that might conceivably arise with a regular vocational instructor working with a visually handicapped student for the first time (Butler, 1969, p.3).

Development of the Project

The conception of the idea for the project has been generally established as March 1968. David M. Butler, then employed by the Western Blind Rehabilitation Center at the Veterans Administration Hospital in Palo Alto, California, was helping blind veterans to make the personal and social adjustments required of regular community life. In describing the Veterans Administration program, Thompson indicates that it:

provides an opportunity for skill and habit training and for attitude conditioning for performance under permanent conditions of little or no sight. Each patient is scheduled to participate in a program of therapeutic activities which include orientation and mobility, braille, writing skills, shop, counseling, physical reconditioning, and group recreation. Participation in all activities is required (and) all units of activity . . . are considered to be of equal importance (Thompson, 1963, p.237).

Butler, a skill specialist working in the prevocational shop program, reasoned that the step-by-step instruction presented to the veterans should work equally as well with adolescents and young adults.

In order to determine the feasibility of the idea, Butler conducted a survey among shop teachers to ascertain their attitudes and experiences in working with visually handicapped students in a public school setting. This survey, see questionnaire in Appendix B, was conducted during March and April of 1968. The findings and conclusions were discussed above under Possible Solutions.

With the results of the survey at hand, Butler spent a portion of the summer of 1968 preparing a proposal for possible Title VI (Special Education) funding. While the first draft of the proposal was being reviewed by the proper authorities, time and effort was extended in starting to acquire the necessary commitments to support the innovative project.

A March 1969 meeting in Santa Cruz between Butler and Richard D. Struck, Director of Programs for Exceptional Children and Pupil Personnel Services, resulted in solidification of ideas and strategies for implementation of the project.

During this same period of time, Struck was a member of the California Rehabilitation Planning Project Advisory Committee participating in activities of the Visual Handicaps Committee. Brief findings and recommendations of this and three other statewide special planning committees were contained in The Hidden Minority, the Planning Project's final report published on July 1, 1969. Included in the document were the following:

Finding:

The blind are generally underemployed or unemployed, partly because job opportunities have not been developed and partly for lack of appropriate training

RECOMMENDATIONS:

- A) Employment opportunities for the blind should be expanded by:
Increasing vocational training and on-the-job training for blind persons.
- C) The Department of Rehabilitation and the Department of Education should work together to extend vocational and educational services to blind youth.

Necessary authorization was needed, however, to allow for the employment of the needed vocational skill specialists for the blind. Legislation to amend the Education Code was authored by Senator Donald Grunsky for the Santa Cruz County Office of Education. On March 18, 1969, requisite legislation was introduced into the State Senate and on August 28, 1969, Governor Ronald Reagan signed Senate Bill 632 which "provided for the

employment by districts or counties of Vocational Skill Specialists for blind pupils so that they might be enrolled in technical and industrial courses, business and distributive education programs, and home-making at the Junior High, High School and community college level (Struck, 1970, p.1)."

At a meeting with representatives from Monterey, San Benito, Santa Clara, San Mateo and Santa Cruz County School's Office, October 9, 1969, it was 1.) assumed that all were interested in participating in the project and that 2.) an application would be prepared using the guidelines and forms for Section D (Exemplary Program and Projects) of the Vocational Education Amendments of 1968. The application, co-authored by Struck and Edler, was submitted to the State Department of Education on November 26, 1969, meeting the deadline date of December 1 for the submission of proposals. Notification of the approval of the application under the provisions of Part B (State Grant Programs), Vocational Education Amendments of 1968, was received on January 22, 1970.

Thus, the Five-County Vocational Skills Training Program for Blind Students was begun in January of 1970 with an initial grant of \$14,776 with Mr. Butler employed as the first technical and industrial instructor for the secondary blind students in the State of California (Struck, 1970, p.1).

Project Operation

During the first phase of the five-county Vocational Skills Training Program for the Blind and each succeeding semester, the initial activities center upon the integration of students into the regular vocational classes. In starting the project, it was necessary to literally "beat the bushes" to locate and identify the visually handicapped students. School administrators were sometimes unaware of handicapped pupils in their schools and it was generally the school nurse and the district or county resource personnel who was informed about the visually impaired student population. Although student identification is an on-going and continuous process, keeping the student roster up to date was found to be a much simpler task.

Because of the limited staff during the project's initial year of operation, students tended to be selected on their grade level, with the seniors in high school having top priority. The rationale being, that some exposure to vocational education was better than no exposure prior to graduation.

In working with the visually handicapped in a vocational area, the skill specialist employs the principles and special methods that have been worked out to handle the ordinary equipment and materials of the particular area with efficiency and safety. In an industrial setting where power tools and machinery is to be used, for example, the following pattern of activities can be used:

1. Make safe initial approach and primary contact to power tools and machinery.
2. Observe the state of rest and state of motion of the tool or machine.
3. Follow safe paths from the primary points of contact to and from

points of control and points of observation.

4. Observe frequently the progress of the work being done by the machine by sound, feel and touch.

5. Follow clean up procedure.

This basic non-visual technique can be applied to various tools, machines or appliances in numerous vocational subject areas. Other similar types of procedural patterns are used by the skill specialist to allow the visually handicapped student to develop the manipulative skills and have the same "hands on" experiences as everyone else in the class.

Concurrently with providing the specialized and individualized instruction to the visually impaired students the prime objective, in-service training was given to the regular vocational teachers by the project staff as the secondary objective. The training involved methodology, terminology, technology, and fundamental instruction of teaching the blind. The program plan provided that:

The in-service training continue through the semester and, by the tenth week of the semester, gradual withdrawal from the class by the skill specialist could begin, thus permitting full integration of the student under the supervision of the Vocational Education Teacher. A consultation period followed through the remainder of the semester maintaining a minimum schedule of one visit per twenty school days for each student.

An outline history of the Vocational Skills Training Program for the Blind may be found in Appendix C.

CHAPTER IV

METHODOLOGY OF THE EVALUATION

Research, in general, consists of two large steps -- the gathering of data and the analysis of these data. In the collection of data, it was determined more than 40 years ago by psychologist Floyd Allport that if you "wanted to know what someone thought, the best way to find out was to ask him (Fox, 1969, p.525)." This obvious and direct approach is still true. However, the researcher's interest was not in the answer in itself, but rather in using the answer obtained to provide a basis for some estimate of, or inference about, the characteristics of 1.) the respondent and 2.) of still larger groups than were measured.

Development of the Instrument

The questioning method for data collection implies that the researcher poses a question because he does not know the answer. The questionnaire technique employs the use of questions on paper, and hopefully later the answers, in an impersonal interaction. It was believed that the advantages of the questionnaire technique, namely 1.) relatively inexpensive mass coverage of potential respondents and 2.) complete standardization of the instructions to which the respondents are exposed, more than outweighed the disadvantages (Fox, 1969, p.548).

After review of the questions raised prior to the research, previously mentioned in Chapter II, it was determined that two questionnaires would be prepared to obtain information from two distinct populations. These two groups exemplify the influence on the visually handicapped student's

ability to participate in vocational education. Included were vocational educators and non-vocational educators (for example, principals and resource teachers), both potent forces in the educational hierarchy of implementing exemplary programs for the visually handicapped in vocational education.

The questionnaire for vocational educators, printed on blue paper and contained in Appendix D, consisted of twelve (12) structured response questions, two limited free response questions, and two totally free response questions. The questionnaire for the non-vocational educators, printed on white paper and found in Appendix E, consisted of thirteen (13) structured response questions, four limited free response questions, and three totally free response questions. Basically, the two questionnaires differed only in that the non-vocational educators were asked four questions concerning district vocational education entitlement under the Vocational Education Amendments of 1968 (Public Law 90-576) and the vocational educators were asked several questions concerning non-visual teaching techniques and possible needed assistance from a skill specialist.

Questionnaires were also mailed to teacher preparation personnel and graduate students and/or student teachers at four state colleges; two specializing in Industrial Education and two specializing in special education. Since the major concern of this study was to investigate various attitudes toward blindness and vocational education, it was determined that student teachers and prospective teachers should also be surveyed. Data from these sources were also included in the material to be analyzed and summarized for Chapter V.

Procedure in Obtaining Responses

The 1970-71 issues of the California Public School Directory, California Public School Programs for Visually Handicapped Children and Youth, (Northern California edition), and various personnel directories from county school offices were utilized to obtain the names and addresses or participants for the study. A quasi-detailed breakdown of the participants for the two groups can be found in Appendix F.

Prior to mailing the questionnaires to the participants of the study, a cover letter was prepared, see Appendix G. The packet mailed to all selected participants included the following printed materials:

1. A letter of introduction.
2. The questionnaire.
3. A self-addressed stamped envelope to expedite the return of the questionnaire to the investigator. Because of the expense and the fact that the questionnaires were not coded in any way, follow-up cards or letters were not used.

Data Processing and Analysis

The questionnaires were assorted and placed into groups by color as they were received. Master tally sheets were used as the main recording system for 1.) tabulating data from the questionnaires and 2.) facilitating the inspectional analysis of the data.

At the discretion of the project directors, it was determined that simple descriptive statistics would be employed for the data analysis plan. "These statistics tell the reader characteristics of the data, like their range, central tendency (average), and variability (Fox, 1969, p.57)." In writing about the descriptive statistical concept, Fox indicates that:

Description means exactly what it implies, that we seek to describe to the reader of our research report the characteristics of the data we have obtained. . . (One) approach is to summarize our data through descriptive statistical procedures to enable the reader to learn the highlights of our findings (Fox, 1969, p.167).

CHAPTER V
FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to investigate the reaction to and the feasibility of a five county vocational program for the visually handicapped using an itinerant approach for the 1.) skill development of the student, and 2.) in-service training of the regular instructor. The specific questions raised in the study were answered by tabulation, calculation, and analyzation of the data supplied by the respondents to the questionnaires.

The findings section is subdivided by the grouping of the respondents. This arrangement of the findings is as follows: 1.) the vocational educators, fifty-three returned the questionnaire found in Appendix D; 2.) the non-vocational educators -- this general title was used to include teachers of the blind and administrators; for example, sixty-two of the questionnaires found in Appendix E were returned; and 3.) the student teachers and prospective teachers, sixty-five questionnaires of the type in Appendix D were returned.

Findings

Responses From the Fifty-three Vocational Educators

1. Participating in or receiving project services was reported by nine respondents, or 17 per cent. An additional fifteen, or 28 per cent, indicated that the purpose of the project had been explained to them.

2. Thirteen educators, or 25 per cent, related visually handicapped students were presently participating in vocational classes at their school. These classes ranged from advanced foods and clothing to woodworking, electronics, typing, and work experience.

3. In regard to admitting a totally blind student into their class without regular assistance from a trained skills-specialist, eight, or 15 per cent, reacted positively while thirty-four, or 64 per cent, reacted negatively while ten, or 19 per cent, were undecided. Thirty five respondents, or 65 per cent, indicated that a vocational skills specialist would need to be present before a blind student would be allowed into vocational class.

4. The need for and the use of a written guide that explains non-visual techniques for working with blind students was reported by twenty-five vocational educators, or 47 per cent.

5. Concerning in-service activities to learn non-visual techniques, twenty-seven of the educators, or 51 per cent, noted a willingness to participate; summer workshops and extension classes were checked most frequently.

6. Of the eleven questionnaires mailed to educators who have integrated visually impaired students into their programs and who have received project assistance, four were returned. Two of the four indicated that the in-service they received was of a nature to make them

feel comfortable in working with the blind in their classroom or laboratory.

7. In the tabulation of responses to the question concerning who should receive training in non-visual techniques, twenty-five respondents, or 47 per cent, favored the vocational educators over the educators of the visually handicapped.

8. The question about parameters brought affirmative responses from twenty-five educators, or 47 per cent, while the question about problems or possible "hang-ups" brought affirmative responses from twenty-three educators, or 43 per cent. Comments from the participants about these topics and from the totally free response questions may be seen in Appendix H.

Responses From the Sixty-two Non-vocational Educators

1. Thirty-four of the respondents, or 55 per cent, reported having the purpose of the project explained to them with a total of nineteen of the respondents, or 31 per cent, receiving project services.

2. Twenty-one non-vocational educators, or 34 per cent, related that visually handicapped students were participating in vocational programs at their schools. Classes mentioned included agriculture, auto shop, record keeping, typing, electronics, work experience, advanced foods, and manual skills.

3. Concerning the practicability of the project, questionnaires from thirty-seven non-vocational educators, or 60 per cent, indicated that it was practical to operate on a regional basis and forty-one or 66 per cent, indicated that it was also practical to offer vocational in-service assistance using the itinerant teacher training approach. Selected alternatives to the operation of the project on a regional basis are included in Appendix I.

4. Twenty-four participants, or 39 per cent, answered that it was more

realistic to train a vocational specialist the non-visual techniques rather than train a visually handicapped specialist the vocational techniques. Nineteen, or 31 per cent, favored training the latter specialists.

5. In response to the questions concerning the 10 per cent of each district's Vocational Education entitlement under the Amendments of 1968 (P.L. 90-576) that must be used for vocational education of the handicapped, the following findings are reported:

- (a) Thirty-nine of the non-vocational educators, or 63 per cent, were aware of the 10 per cent regulation;
- (b) Twenty-one of the respondents, or 34 per cent, reported funds being used correctly while seventeen, or 27 per cent, did not know;
- (c) Twenty-one of the returned questionnaires, or 34 per cent, reported no duplication of project services and services provided from the allocated funds; twenty-three, or 37 per cent, did not know; and
- (d) Twenty-two of the respondents, or 35 per cent, indicated a willingness to use these funds for the visually handicapped, while fourteen educators, or 23 per cent, responded negatively. Comments regarding the use of these funds for the visually handicapped are included in Appendix I.

6. The tally of returned questionnaires showed 1.) twenty-five non-vocational educators, or 40 per cent, reporting that school counselors investigate their visually impaired students' capabilities and interest in vocational education, and 2.) eighteen non-vocational educators, or 29 per cent, reporting that work-experience coordinators assist the visually

impaired to find work stations and job placement

7. On the questions about in-service training, thirty-four of the respondents, or 55 per cent, indicated a willingness to participate in these activities to learn about the visually handicapped and non-visual teaching methodology. Summer workshop and evening class were tied for first priority with "During School" eleven tallies back in third priority.

8. Twenty-five of the respondents, or 40 per cent, indicated that parameters would be established before allowing a visually handicapped student into a vocational program and fourteen respondents, or 23 per cent, anticipated problems or "hang-ups" in working with the student in vocational education. Comments from these two questions and from the totally free response questions may be seen in Appendix I.

Responses From the Sixty-five Student Teachers and Prospective Teachers

1. In regard to admitting a totally blind student into their class without regular assistance from a trained vocational skills specialist, thirteen teachers, or 20 per cent, responded positively in comparison to the thirty-six teachers, or 55 per cent, who responded negatively, and the thirteen teachers, or 20 per cent, who were undecided. Thirty-nine teachers, or 60 per cent, indicated that a vocational skills specialist would need to be present before a blind student would be integrated into their vocational class.

2. The use of a written guide that describes the non-visual techniques for working with blind students was reported in the affirmative by forty-seven teachers, or 72 per cent.

3. Concerning their participation in in-service activities to learn non-visual techniques, forty-three teachers, or 66 per cent, expressed

a willingness to receive this instruction. Summer workshops was the most frequently checked means of acquiring the in-service instruction with evening and extension classes a distant second and third.

4. In the tabulation of responses to the question of who should receive training in non-visual techniques, thirty-eight participants, or 58 per cent, answered that it was more realistic to train a vocational specialist the non-visual techniques while only fourteen teachers, or 22 per cent, answered that training the visually handicapped specialist was more realistic.

5. The question concerning parameters brought affirmative responses from twenty-one teachers, or 32 per cent, while the question about problems or possible "hang-ups" brought affirmative responses from twenty-four teachers, or 37 per cent.

Conclusions

The analysis of the data and the basic findings of the study yielded the following conclusions:

1. PARTIALLY SIGHTED AND BLIND STUDENTS CAN BE SUCCESSFULLY INTEGRATED INTO REGULAR VOCATIONAL PROGRAMS. Addition of the replies from vocational and non-vocational educators concerning the present participation of visually handicapped students in vocational classes totalled 34 affirmative responses. This evidence suggests that partially sighted and blind students can be successfully integrated into regular vocational programs. In terms of development and achievement, during the 1970-71 school year, for example, none of the twelve visually impaired students in the vocational skills program received less than a "C" grade in any vocational or industrial education class. The students were graded by the regular teacher based upon the same performance tests, written tests, and attendance marking system as the sighted students.

The fact that the visually handicapped are participating in business education is also of significance; indicative of the possibility that this vocational area does not need the sophisticated curriculum materials and highly trained skill specialists. As skill specialists are extremely few in number, even nationwide, it is encouraging that regular business education instructors can integrate visually handicapped students into their vocational programs without large amounts of in-service instruction.

2. REGULAR VOCATIONAL EDUCATORS WILL ENROLL BLIND AND PARTIALLY SIGHTED PUPILS IF THEY RECEIVE IN-SERVICE TRAINING. The need for in-service training on behalf of the vocational educators and non-vocational educators may be due in part to the increased considerations for vocational education

for all people and the emerging aspirations of handicapped students. The strategies employed by the innovative project to implement an itinerant teacher approach of in-service training with a population of visually handicapped students in vocational education resulted in several unique problems. Paramount among these problems with regards to in-service training was the inability to locate a skill specialist for implementing the business and distributive education portion of the project and the difficulty to conduct in-service training in full and/or over-crowded vocational classrooms and laboratories. Regular instructors participating in the vocational skills project tended to have few fears and anxieties as long as the skill specialist was present to assist the visually handicapped student. The attention to the sighted students' needs, however, left little time for the regular instructor to observe and perfect the techniques used by the skill specialist in allowing the visually limited student to function in the laboratory. The need for and the willingness to participate in in-service activities to learn non-visual techniques is readily apparent from an analysis of the findings.

3. REGIONALIZED EDUCATIONAL SERVICES CAN BE SUPPORTED. The practicality of operating on a regional basis was affirmed by over a 3 to 1 margin of those who responded to the questionnaire. To the itinerant skill specialist, the inherent difficulties of a regional operation are a daily concern. When a five-county area of over 7,000 square miles are involved, the indirect proportion between travel and services is most apparent. Further discussion as to the alternatives of a regional basis of operation should not be ignored.

4. THE USE OF V.E.A. FUNDS FOR THE HANDICAPPED NOT CLEAR. Inspecting

the findings from the non-vocational educators, one could conclude that knowledge does exist about the use of 10 per cent of each district's Vocational Education entitlement under the Amendments of 1968 (P.L. 90-576) must be utilized for vocational education of the handicapped. However, it is also possible to conclude that over 50 per cent of the non-vocational educators are uncertain as to whether or not the funds are being used properly.

5. A "COMMUNICATIONS GAP" EXISTS REGARDING THE VISUALLY HANDICAPPED AND VOCATIONAL TRAINING. The comments from the study participants about parameters and problems or possible "hang-ups" brought a variety of responses, ranging from insight to naivety. This confirms the need for cognitive and affective behavioral change and/or modification regarding the vocational education of handicapped persons. The limited education of the sighted in understanding and accepting the visually impaired can only be thwarted with an on-going program of education and dissemination of information.

6. THERE MUST BE ALTERNATIVES TO FUNDING VOCATIONAL TRAINING PROGRAMS FOR THE VISUALLY HANDICAPPED. The current nine hundred and ten dollars State support for supplemental services for the visually handicapped, (California Education Code Section 18102), to include mobility, braille books, recordings, special supplies, and equipment, as well as instruction in "vocational arts, business arts, or home-making," is far from adequate. Unless State support is increased to provide for all of the above services, the visually handicapped students enrolled in the public schools in California will be denied their right to a full educational program.

Recommendations

Based on the collected data relative to this study and the investigator's experiences with the project, the following recommendations are made in an attempt to further the development of vocational education for the visually handicapped:

1. The positive free response statements, the interest shown in the project, and the ability of the staff to meet the program objectives justify the recommendation that a similar project or projects be replicated in other regions of the state. However, this exemplary and innovative effort to integrate visually handicapped students into regular vocational programs was not without problems. Staff recruitment, funding difficulties, attitudes and fears toward blindness, and time spent in travel are examples of the types of problems encountered by this project. The exposure to these problems will allow others to build upon the experience of the Five-County Vocational Skills Training Program for Visually Handicapped Students.

2. Because of the acceptance and feasibility of the itinerant approach to in-service training, it is suggested that an itinerant in-service team be developed at the state level. This team would be available on a consultant basis for any district or county with an identified need. The consultant(s) would work directly with the teachers using films, video tapes, demonstrations, and other methods in presenting the non-visual techniques necessary to integrate a visually handicapped student into a regular vocational or career education program.

3. Prospective vocational education teachers should be made aware of the possibility that handicapped students will be enrolled and will participate in career education programs in ever increasing numbers. Presentation

and discussion of the methods and techniques used in working with the handicapped should be pursued in undergraduate classes, field trips, and seminars. Colleges and universities that train educators of the handicapped should also devote additional attention to vocational education methodology.

4. The establishment of a state task force to explore the vocational education, work study, work evaluation and career counseling needs of the blind and partially sighted minors. This task force to include representatives of the State Department of Education, Department of Human Resources' Agencies, conducting test programs, both private and public, as well as parents and students.

5. An investigation or survey should be conducted to determine the money spent on handicapped individuals enrolled in vocational education programs. In California for school year 1971-1972, the mandated allotment was a minimum of 3 million dollars. This reporting or accountability of funds would facilitate the sharing of information about programs and the proper use of support for the handicapped in vocational education. A clearly stated master plan for the implementation, funding and fiscal evaluation of a state-wide program of vocational skill training, counseling and job placement for blind and partially sighted minors is needed.

6. There needs to be a clearing house for career and vocational materials for the handicapped at the state level. This office would locate, publish, and disseminate information, literature, and curriculum materials that have been prepared for the handicapped. Future vocational teachers, vocational educators, and non-vocational educators alike need to be informed of the sources available in efforts to assist all students in career education.

7. The assimilation and implementation of concepts and model plans

from the 1.) U.S. Commissioner of Education, 2.) National Advisory Council for Vocational Education, 3.) California Career Education Task Force, and 4.) American Foundation for the Blind National Task Force on Career Education should be encouraged. The pronouncements from the Commissioner and the three listed groups concerning the preparation of students for employment are intended for vocational and non-vocational alike. Although the resources and efforts of a three member staff are limited, the goals and objectives of the project are consistent with the current reformation of our entire education system in order to prepare increasing numbers of students for the world of work.

8. Consideration should be given to alternatives to funding vocational education programs for visually handicapped minors, to include such resources as the Department of Rehabilitation and the Department of Social Welfare. Both departments have a vested interest in identifying, training, and providing financial support for blind minors and adults. Both are concerned that all visually handicapped persons live meaningful lives and are productive. Participation by one or both of these agencies should not be regarded as interference with the mandate of the public school system, nor should the infusion of rehabilitation and social welfare dollars be regarded as supplanting public school funds.

9. Regional summer and extension courses should be developed through San Francisco State and Los Angeles State universities, in cooperation with the State Department of Education, Department of Rehabilitation, Department of Social Welfare, as well as District and County personnel. Course content should include opportunities for "regular" vocational education teachers to develop skills needed to train visually handicapped pupils in the area of vocational education.

CHAPTER VI
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CHAPTER VII
APPENDIXES

APPENDIX A

QUESTIONS RAISED BY THE FIVE-COUNTY ADVISORY COMMITTEE
PRIOR TO THE EVALUATION REPORT

1. Can such a project be operated on a regional basis?
2. What are the problems inherent with a regional operation?
3. Is travel a significant problem?
4. What are alternatives to reduce travel time and expenses?
5. What are the problems in identification of visually handicapped students?
6. Are work-experience coordinators willing to assist the visually handicapped?
7. How much in-service time is needed to train a trade and industrial teacher in the methodology for assisting the blind?
8. How much slippage takes place with an in-service trained teacher in regards to attitudes and non-visual skill techniques?
9. Are students already in business education classes?
10. Are the business education teachers doing a good job?
11. Is there a need for training home economics teachers to be specialists in non-visual techniques?
12. Is it possible to train a teacher in non-visual methodology with a written guide?
13. Are school counselors aware of their visually handicapped student's capabilities and interest in vocational education?
14. Is it feasible to write a curriculum guide to assist a regular vocational teacher in working with a visually handicapped student in his class?

15. Is it possible to perform a task analysis of what a Vocational Skills Training Program skills specialist does in working with a teacher?
16. Is it more practical to (1.) train a Trade and Industrial specialist the non-visual techniques or (2.) train a visually handicapped specialist the vocational techniques?
17. To what effect did the (1.) coordinating council of professionals and (2.) project advisory committee have on the project?
18. Is there a duplication between Vocational Skills Training Program services and the services provided from a allocated funds of P.L. 90-576 (Part B)?
19. Is it possible to measure an attitude change in teachers receiving in-service training from the Vocational Skills Training Program staff?

APPENDIX B

1968 SHOP TEACHER SURVEY

ATTITUDES TOWARD BLINDNESS

-VOCATIONAL SKILLS TRAINING PROGRAM FOR THE BLIND-

Check appropriate box which best represents your feelings.
 SA - Strongly Agree, MA - Midly Agree, MD - Mildly Disagree,
 SD - Strongly Disagree

	SA	MA	MD	SD
1. A blind person might as well accept the fact that blindness makes people pretty helpless.				
2. On the whole, blind children seem less intelligent than sighted children.				
3. Blind people are used to failing in most things they do.				
4. A blind person should not have to meet the same standards as others.				
5. Blind people are constantly worried about the future.				
6. Blindness has little or no effect on intelligence.				
7. A blind person is not afraid to express his own feelings.				
8. A blind person can never really be happy.				
9. Most blind people are dissatisfied with themselves.				
10. A blind person can't afford to talk back to people.				
11. One can live in a competitive society and still compete successfully without sight.				
12. It makes me feel a little guilty to know that I can see and others cannot.				
13. You should not expect too much from a blind person.				
14. Most blind people feel that they are worthless.				
15. It is possible to know the beauty of the world without sight.				
16. My attitude towards a blind person would be based more upon his personality than upon the fact that he is blind.				
17. Blind people do not have as much initiative as sighted people.				
18. It is very difficult to make a blind person change his mind once he has decided on something.				
19. It must be bitterly degrading for a blind person to depend so much on others.				
20. Many blind people are economically independent.				
21. Blind people are more easily upset than sighted people.				
22. Most blind people think and act alike.				
23. It's difficult to understand the blind because they keep so much to themselves.				
24. There are things worse than being blind.				
25. Acceptance of blindness is the same thing as acceptance of anything else in life.				
26. The blind adult is not quite as mature or "grown-up" as the sighted adult.				
27. Blindness does not change the person any more than any other handicap.				
28. The blind have as many interests as the sighted.				
29. I feel that blindness is as hard to bear as complete paralysis.				
30. A blind person is constantly worried about what might happen to him.				

ATTITUDES TOWARD BLINDNESS Continued

Insert the appropriate number which best describes your contact with the blind in each statement.

1. Little or no contact
2. Occasional contact
3. Regular daily contact

1. Blind student(s) in Industrial Arts classes.
2. Lecturers at school or in community dealing with blindness.
3. Safety programs geared specifically for protection of eyesight.
4. Field trips to schools or agencies for the blind.
5. A teacher who is blind.
6. A neighbor who is blind.
7. A relative who is blind.
8. Educational movies, filmstrips, or slides dealing with blindness.
9. A student who has seriously lost some or all of his eyesight since he entered your school.
10. Any formal teacher education programs dealing with blindness.
11. Any college workshops or institutes where Industrial Arts and the visually handicapped were discussed.
12. Recent educational or technical books you have read about blindness.
13. Magazine or newspaper articles you have read dealing with the education of the blind.
14. An adult blind person who works in an industrial setting.
15. A visit to a rehabilitation center for the blind.

Please fill in the following information:

Have you ever taught a blind student in any of your Industrial Arts classes?

Yes No (circle)

If yes, what subject? _____ (Woods, Metal, General Shop, etc.)

Would you take a totally blind student (high school) into your General Shop Class?

Yes No I don't know (circle)

How many years have you been teaching Industrial Arts? _____

If you knew of a totally blind student (high school) who expressed a real desire to take any one of the following subjects or subject-matter areas; what would you do?

1. Accept him outright
2. Refuse him outright
3. Accept him on a trial basis

Indicate with 1, 2 or 3 for the following:

Woodworking
 Plastics
 Graphic Arts
 Metalworking
 Electronics
 Auto Mechanics
 Textiles

Leather
 Carpentry
 Sheet Metal
 General Shop
 Mechanical Drawing
 Welding
Other: _____

Other: _____

Other: _____

APPENDIX C

OUTLINE HISTORY

of the

VOCATIONAL SKILLS TRAINING PROGRAM FOR THE BLIND

May 1967-April 1969 California Rehabilitation Planning Project, Visual Handicaps Committee (Dick Struck)

March 1968 Conception of the Program (Dav Butler)

March 18, 1969 Introduction of Senate Bill 632 by Senator Donald Grunsky

March-April 1968 Survey conducted among shop teachers to see if there was a need

July 1968 First Title VI proposal written

August 28, 1969 Senate Bill 632 signed by Governor Reagan

February 1969 Preliminary leg-work, initial contacts with P. Wurtzburger

March 1969 First meeting between Dav Butler and Dick Struck

October 9, 1969 First meeting of the project advisory committee

November 1969 Preparation of Vocational Education Amendments of 1968 application (Dick Struck and Larry Edler)

November 26, 1969 Submission of application to the State Department of Education

January 22, 1970 Santa Cruz Co. Office of Education received \$14,775 VEA grant. Start of the VSTP, Phase I. Employment of Dav Butler (Trade & Industrial)

March 17, 1970 Chicago, Illinois - Paper presented on the VSTP at the National Council of Exceptional Children Convention - (Dav Butler)

July 1, 1970 Start of Phase II

July 10, 1970 National Rehabilitation Association Conference, San Mateo, CA (Dav Butler)

July-August 1970 Census of 5 county visually handicapped students - How many, where, etc.

October 30, 1970 Funding of Phase II secured \$63,386

December 1, 1970 Staff additions: Dick Gray (Trade & Industrial)
Gene Russell (Guidance & Work Experience Ed.)
Ellen Fischman (Secretary)

March 17-18, 1971	Annual Conference on Industrial Education, Oakland, CA (Dav Butler and Gene Russell)
March 19-20, 1971	Annual California Industrial Education Association Convention, Oakland, California (Dav Butler and Gene Russell)
April 17, 1971	VSTP presentation at the 24th semi-annual Convention of the Associated Blind of California, Inc., Fresno, CA (Dav Butler and Gene Russell)
April 26, 1971	Model Development with Alameda County
May 24, 1971	Staff Replacement: Jean Ann Calender (Secretary) for Ellen Fischman
June 1, 1971	Staff Addition: Connie Rahn (Home Economics)
June 30, 1971	Resignation of Dick Gray
July 1, 1971	Start of Phase III, Evaluation Phase
July 15, 1971	Presentation on Cable TV by Dav Butler
August 17, 1971	Resignation of Dav Butler
Autust 1971	Established cooperative with VA Western Blind Center, Palo Alto
September 20, 1971	Staff Replacement: Wayne Gaver (Trade and Industrial) for Dick Gray
September 25, 1971	First of nine (9) workshops for Vocational Education Teachers and Counselors, Fresno, CA (presentation by Gene Russell)
September 28, 1971	First of monthly meetings with Calif. Department of Rehabilitation
October 1971	Preparation of video tape for Special Study Institute
October 9, 1971	Workshop in San Jose
October 21, 1971	Application for Phase III submitted, \$73,103 requested
October 23, 1971	Workshop in Arcata
November 6, 1971	Workshop in Redding
November 12, 1971	VSTP presentation at a Special Study Institute for Educators of the Visually Handicapped, Palo Alto (Gene Russell)
November 20, 1971	Workshop in Sacramento

December 4, 1971 Workshop in San Diego

December 18, 1971 Workshop in San Francisco

January 8, 1972 Workshop in Ontario (Dav Butler)

January 22, 1972 Seminar for educators interested in career preparation for visually handicapped students, San Francisco State College (Gene Russell)

March 2-3, 1972 Annual Conference on Industrial Education, Anaheim, CA (Wayne Gaver)

March 4, 1972 Annual California Industrial Education Association Convention, Anaheim, California (Wayne Gaver)

March 15-17, 1972 American Foundation for the Blind National Task Force on Career Education, Glen Cove, New York (Gene Russell)

March 16-18, 1972 California Transcribers and Educators of the Visually Handicapped, North Hollywood, CA (Connie Rahn)

May 1, 1972 Staff Replacement: Sharon Van Unen (Secretary) for Jean Ann Calender

APPENDIX D

VOCATIONAL SKILLS TRAINING PROGRAM
2643 Park Avenue
Soquel, California 95073
(408) 475-9232

QUESTIONNAIRE

Introduction. This questionnaire was developed to assist in the efforts to evaluate the Vocational Skills Training Program for Visually Handicapped Students (VSTP). The evaluation report will contain no mention of individuals and/or schools. We will gratefully appreciate your candid response to the following questions.

Instructions. Please answer all questions in the space provided.

Questions.

1. Are you participating in or receiving VSTP services? Yes ___ No ___
2. Was the purpose of the VSTP explained to you? Yes ___ No ___
3. Are visually handicapped students now participating in vocational classes at your school? Yes ___ No ___ I don't know ___
4. Would you take a totally blind student into your class without regular assistance from a skills specialist trained in non-visual techniques: Yes ___ No ___ I don't know ___
5. Would a vocational skills specialist need to be present before allowing a blind student into your vocational class? Yes ___ No ___
6. Is there a need for training vocational teachers to be specialists in non-visual techniques? Yes ___ No ___ I don't know ___
7. Would you use a written guide that explains non-visual techniques for working with blind students in your vocational area(s)?
Yes ___ No ___ I don't know ___
8. Would you participate in in-service activities to learn non-visual techniques? Yes ___ No ___ I don't know ___
9. In which type of in-service training would you be most likely to Participate?
___ a. Summer workshop
___ b. Evening class
___ c. After school
___ d. Preparation period
___ e. Extension class
___ f. Other

10. How much direct in-service assistance did you receive in non-visual teaching techniques?
- a. None
 - b. 1 hour
 - c. 2 hours
 - d. 3-5 hours
 - e. 6-10 hours
 - f. More than 11 hours
11. Was this assistance enough to make you feel comfortable in working with the blind in your classroom? Yes No Doesn't apply
12. Is it more realistic to (a.) train a vocational specialist the non-visual techniques or (b.) train a visually handicapped specialist the vocational techniques? a. _____ b. _____
13. Are there parameters you would establish before allowing a visually handicapped student into your vocational program? Yes No
If yes, please list or explain:
14. Are there certain questions, problems, or "hangups" you might anticipate working with a visually impaired student in vocational education? Yes No if yes, please list or explain:
15. Can you suggest ways to improve:
- a. VSTP effectiveness.
 - b. Vocational education for the blind.
 - c. Placement of the blind into the business sector.
16. The back of this page may be used to make comments concerning this questionnaire and/or the VSTP.

APPENDIX E

VOCATIONAL SKILLS TRAINING PROGRAM
2643 Park Avenue
Soquel, California 95073
(408) 475-9232

QUESTIONNAIRE

Introduction. This questionnaire was developed to assist in the efforts to evaluate the Vocational Skills Training Program for Visually Handicapped Students (VSTP). The evaluation report will contain no mention of individuals and/or schools. We will gratefully appreciate your candid response to the following questions.

Instructions. Please answer all questions in the space provided.

Questions.

1. Are you participating in or receiving VSTP services? Yes No
2. Was the purpose of the VSTP explained to you? Yes No
3. Are visually handicapped students now participating in vocational classes at your school? Yes No I don't know
4. Is it practical to operate on a regional basis? Yes No
5. Is it practical to offer vocational in-service assistance using the itinerant teacher trainer approach? Yes No
6. Can you suggest alternatives to the regional basis of operation using the itinerant teacher approach?

7. Is it more realistic to (a.) train a vocational specialist the non-visual techniques or (b.) train a visually handicapped specialist the vocational techniques? a. b.
8. Did you know that 10 percent of each district's Vocational Education entitlement under the Amendments of 1968 (P.L. 90-576), must be used for vocational education of the handicapped?
Yes No

9. Are these "10 percent Part B funds" currently being used for vocational education for the handicapped in your district? Yes _____ No _____ I don't know _____
If yes, what percent is for the visually handicapped? _____
10. Is there a duplication between VSTP services and the services provided from allocated funds of P.L. 90-576 (Part B)? Yes _____ No _____ I don't know _____
11. Would you use some of the "10 percent Part B" vocational education funds for the visually handicapped? Yes _____ No _____ If yes, for what purposes: _____
12. Are there problems in identification of visually handicapped students? Yes _____ No _____ If yes, please explain: _____
13. Are school counselors investigating their visually handicapped students' capabilities and interest in vocational education? Yes _____ No _____ I don't know _____
14. Are work-experience coordinators assisting the visually handicapped to find work stations and in job placement? Yes _____ No _____ I don't know _____
15. Would you participate in in-service activities to learn about the visually handicapped and non-visual teaching methodology? Yes _____ No _____
16. In which type of in-service training would you be most likely to participate?
 _____ a. Summer workshop
 _____ b. Evening class
 _____ c. After school
 _____ d. During school
 _____ e. Extension class
 _____ f. Other
17. Are there parameters you would establish before allowing a visually handicapped student into a vocational program? Yes _____ No _____
If yes, please list or explain: _____

APPENDIX F

BREAKDOWN OF QUESTIONNAIRE MAILING

COUNTY	VOCATIONAL EDUCATORS		PER CENT	NON-VOCATIONAL EDUCATORS		PER CENT
	MAILED	RETURNED		MAILED	RETURNED	
Monterey	19	-	-	17	-	-
San Benito	0	-	-	5	-	-
San Mateo	37	-	-	24	-	-
Santa Clara	19	-	-	33	-	-
Santa Cruz	20	-	-	26	-	-
Other	1	-	-	18	-	-
Totals	96	53	.552	123	62	.504

INSTITUTIONS	PROSPECTIVE TEACHERS		PER CENT	TEACHER PREPARATION PERSONNEL		PER CENT
	MAILED	RETURNED		MAILED	RETURNED	
Chico State College	25	15	.600	10	6	.600
Fresno State College	25	12	.480	5	3	.600
San Diego State College	25	24	.960	5	0	.000
San Francisco State College	25	14	.560	5	1	.200
Totals	100	65	.650	25	10	.400

APPENDIX G
COVER LETTER

OFFICE OF EDUCATION
SANTA CRUZ COUNTY
RICHARD R. FICKEL, SUPERINTENDENT
SANTA CRUZ, CALIFORNIA

December 3, 1971

During the past two years, the Five-County Vocational Skills Training Program for the Visually Handicapped (VSTP) has been attempting to integrate visually impaired pupils into existing vocational programs. The time has come to evaluate the activities of the VSTP. The questionnaire is one phase of this evaluation.

For the purpose of this investigation, a visually handicapped student is defined as one who uses braille materials, a long cane, magnifiers, and/or other adaptive devices to function in a school setting. Knowledge of the VSTP or about the visually handicapped is not necessary.

Your support in this research will be appreciated. Enclosed is a stamped, self-addressed envelope for your convenience.

Sincerely Yours,

Richard D. Struck, Director
Programs for Exceptional Children
Adults and Pupil Personnel Service

Gene H. Russell, Head Teacher
Vocational Skills Training Program
for the Blind
2643 Park Avenue
Soquel, CA 95073

GHR:jac
Enc.

APPENDIX H

RESPONSES FROM VOCATIONAL EDUCATORS

Parameters established before allowing visually handicapped student into vocational program

1. "There is a need for safety education plus a knowledge of procedures that do not lend themselves to sightless workers. Safety is a most important consideration of handling machinery."
2. "Interest and true desire on part of student. Demonstrated ability to eventually adjust socially to handicap (employable)."
3. "No working on saws."
4. "Almost every phase of my course depends on visual awareness."
5. "I can't visualize a totally blind person in my program which is woodshop."
6. "There would need to be clear evidence that the skill learned could lead to employment."
7. "Notification of the student's enrollment early enough to prepare."
8. "Teacher training, necessary special equipment, trained teaching assistant, small class."
9. "I would need to know the best techniques for working with the imparied student in order to be confident."
10. "Do I have appropriate materials and a program useful to the student? Can the student work successfully here but not get hurt?"
11. "Limitation on types of equipment which can be used alone."
12. "I would insist that a visually handicapped specialist be present at each class meeting, because I do not have time to give special attention to one student when there are 18 to 20 other students who need my help."

Problems or "hangups" anticipated working with a visually handicapped student

1. "We cannot accept a visually handicapped student in Electronic Servicing Classes. For such students the risk of electrocution is very high."
2. "Amount of time needed for individual instruction and safety."
3. "I would certainly need some training before hand."
4. "Accidents."
5. "Right at the moment, I cannot think of a single area that a business education employer could use a visually impaired--unless it would be as a transcription operator."
6. "Safety of individual."
7. "In the I. A. area, student has to move around and use power equipment, getting to know the shop would be a problem, but I think it could be worked out."
8. "Frustration re: ability to supervise student enough."
9. "I'm afraid my blind student won't participate as much next semester without Miss Rahn. The other students help him either not at all (afraid!) or too much."
10. "I wouldn't."
11. "I don't know what they might be but I'd expect them."

Suggestions for improving VSTP effectiveness

1. "Make sure the visually handicapped specialist is here every class meeting."
2. "Information, P. R., materials provided."
3. "Perhaps a program consisting of a survey type experience in several kinds, types, etc. of manipulative work could be offered in order to establish aptitudes, etc. and possibilities."

4. "Talk with teacher before student is in class. Give teacher literature to read pertinent to his or her subject and abilities of student. Stress with student need to communicate with teacher."

5. "Perhaps a better program could be devised (sic) if there were fewer students (10) at most, with the same type of problems which could be dealt with by the teacher in setting up requirements, techniques and demonstrations etc."

Suggestions for improving vocational education for the blind

1. "I think we should stick to the basic tools that will give the kid an opportunity to make his own choices as employment market changes."

2. "Publish a list of employers in our area by county or school district who will take the handicapped and in what areas of employment."

3. "Train them to work in areas that they can use later in life to make a living."

4. "Develop more work stations in the community for the visually handicapped."

5. "Better Junior High preparation for blind students (Exploration into vocational possibilities). Teacher education schools need curriculum in this area."

6. "More general information sent to business instructors. Also information regarding speakers, informational meetings, etc. Teachers, however, I would venture, know little, if anything, regarding what many blind students can and/or are capable of doing!"

Suggestions for improving placement of the blind into the business sector

1. "Case worker developing work experience stations."

2. "Educate employers regarding what these people can do."

3. "Need to work with employer and employee anticipating any problems--
necessity for braille books or directives, etc."

APPENDIX I

Alternatives to the regional basis of operation using the itinerant teacher approach

1. "More centers similar to Albany for more concentrated work."
2. "Regional schools."
3. "After school classes using the vocational equipment available in the schools."
4. "On one county basis -- or interdistrict, where excess travel time is not."
5. "Regional basis, but with itinerant teachers assigned to districts (one or more) on a need basis."
6. "It seems the teachers cover too many miles. If one could concentrate on one or two counties, more students could be seen and less time would be spent commuting."
7. "We may come closer to an alternative by having all visually handicapped high school students attend one high school. This would eliminate most of the traveling on behalf of the Resource Teacher, but we would still be confronted with the problems (of the practicality of a Resource Teacher to be an instructor in vocational subjects).
8. "I think this is a good approach only more staff is needed increasing the service to more students."
9. "No, we are happy with this itinerant teacher approach."

Suggested uses of the Vocational Education entitlement funds under the Amendments of 1968 (P.L. 90-576)

1. "We used funds for the Project in Vocational Education outlined in

Career Opportunities for the Visually Handicapped.

2. "OJT, in-service training, special materials."
3. "Mobility training."
4. "Training of students in manufacturing and manipulative hand tool skills."
5. "Additional vocational education for physically and mentally retarded visually handicapped."
6. "Tutorial assistance and special and unique student needs."
7. "I would consult the regular classroom teacher for suggestions as to needed equipment."
8. "Assist your efforts where needed."
9. "To train special education teacher to become of assistance to Work Experience Coordinator and Vocational Education Coordinator on their campuses."
10. "Train on switchboards -- Business machines -- Much training in social graces."
11. "To provide actual job counseling to student; to adapt vocational materials for blind students; to sponsor field trips introducing students to various industries and professions; and to provide work study projects."

Parameters established before allowing visually handicapped student into vocational program

1. "Basic use of tools."
2. "Teacher feel comfortable in having student."
3. "Determine that class objectives relevant to students capability and interests. Ascertain that any special equipment required is available; that special resources as might be required are available (i.e. itinerant teacher-trainer)."
4. "Considerations of the ability and safety of the student."

5. "The student should: have a good understanding of what vocations he is capable of doing; be aware of the limits of his vision: be a reliable student who will attend class; be mature enough to handle responsibilities of program."

6. "Must have social graces, patience, ability to interact socially."

7. "In certain vocations where power tools are in use, establish limits so students do not endanger personal safety or safety of others. This would be an individual matter."

8. "Must be a relatively safe experience, assign a student to work with him."

9. "Limit class size -- orientation to equipment with limitations on use of those of danger."

10. "If it were mutually agreeable between the student, the student's parents, the teacher and principal."

Problems or "hangups": anticipated working with a visually handicapped student

1. "Need to know more about this type of special education student."

2. "Biggest problem is in teacher acceptance. Parent acceptance."

3. "People just don't know how to approach the training of the visually handicapped and have no information on what they can really do."

4. "Availability of non-visual materials to vocational education teachers; mobility to off campus training stations; parental acceptance of schools interest."

5. "Orientation to plant, safety, independent work habits, etc. These are the usualy "hangups" of every I. A. teacher."

6. "Safety factors -- most are obvious. Projection of actual job placement. What would failure do to student?"

7. "Don't want to discourage a person further but don't know what he could truly be expected to do."

8. "Over solicitous adults and peers."

Suggestions for improving VSTP effectiveness

1. "Presentations to teachers - the program."

2. "More advertisement."

3. "Cut down on travel time of each employee. Hire people more aware of needs of blind instead of making sure person is from vocational education. Use of Resource Teachers trained by VSTP people in class with student."

4. "Reaching the students before high school; more individual counseling; publishing some guidelines for the "regular" teachers to have with them at all times, before child shows up in her class and before specialist shows up."

5. "More staff; more caseload."

6. "Better dissemination of information about the program."

7. "On-call availability."

8. "More VSTP teachers to cover more students - or a smaller county area covered."

9. "Examine some of the approaches of open structured education; i.e. those that bring about more decision-making by the student."

10. "I would like more follow-ups from the teacher who is representing VSTP as to what he is doing with the student and how I can help the student, too. There should be some report made about the student's progress too."

11. "Conduct regional workshops for class room vocational teachers. This could be presented on Saturdays during the school year or offered for one or two weeks during the summer. Make these workshops attractive and

worthwhile. Let the teachers earn credits applicable towards their salary step up scale. Offer scholarships which would include tuition, board and room. Offer field trips into schools, industrial plants and other places where the blind are working. Have qualified teachers on the staff to demonstrate the methods of teaching the visually handicapped. Have blind people to demonstrate these methods too."

12. "It would be interesting and worthwhile if VSTP could sponsor summer workshops both for Resource teachers and for students who want further background or practice in a particular field. Maybe the summer could be used to screen and give some initial training to students who will be enrolled in the vocational education in the fall. Voc-Ed. teachers might be more willing to take a student who had some skills to start with."

Suggestions for improving vocational education for the blind

1. "Vocational opportunities listed."
2. "Train more teachers to help "roving" teacher."
3. "Need on the job training and vocational skills that are not closed workshops."
4. "More VSTP."
5. "In-service training for vocational educators: 1.) attitude adjustment and 2.) Resources available."
6. "A workshop for resource teachers and counselors would be valuable-- teach them techniques to be implemented."
7. "Be sure the occupation the student is training has placement potential and is relevant to the needs of the blind."
8. "The special education personnel have to be tooled up to see their role, responsibilities, and need to assist regular coordinators."
9. "Improve vocational education for all students. Blind students;

education need not be isolated."

10. "More emphasis on job analysis. Intelligence and career testing for setting realistic goals. Contacts with other blind already employed."

11. "Greater degree of integration with "normal" population in all areas of education."

12. "High Schools are a good place to start, but we need training centers for the blind after high school just as much as we need colleges and universities for them. By the time of high school graduation we should have a good idea in what area a visually handicapped student could be trained. We need to come up with an evaluation and guidance program geared to meet this objective. We need to investigate what other school districts, counties, states have done in this area."

Suggestions for improving placement of the blind into the business sector

1. "Need P. R. to educate employers. Job developers to obtain job stations."

2. We need business and industry to cooperate. How can this be accomplished?"

3. "Concentrated efforts to make employers aware of work skills of the visually handicapped."

4. "Correlation with Vocational Rehabilitation services."

5. "Community acceptance and business resources have to be developed to be of assistance to a VSTP itinerant teacher."

6. "Work by resource person to educate businessmen on the possibilities of work study placements."

7. "Set up an advisory committee from the community."

8. "Demonstration to public of what handicapped can do."

9. "A coordinator specifically (sic.) assigned to task. Could be a

"lay" individual."

10. "Employment of a work experience coordinator for the handicapped by each district and/or VSTP."