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ABSTRACT

A followup study of aurally, visually, and physically handicapped graduates of the Cincinnati Public Schools was investigated for use in future educational planning for handicapped children. A random selection of 24 aurally handicapped, 15 visually handicapped and 34 physically handicapped graduates were interviewed. Twenty nine of the group met the criteria of being employed with a measurable wage and employers of all 29 subjects were interviewed. Findings were indicated by the researchers to show that the majority of the handicapped pupils were capable of successful occupational adjustment to unskilled and semiskilled jobs; however, impractical school experiences were not markatable enough to provide economic stability. Recommendations were made that the administration should assume more responsibility for the occupational placement of disabled pupils; the scope of the pre-vocational training program should be expanded to meet the changing labor market demands; and specific program objectives which pair specific skills with specific job opportunities based on employment situations of former pupils should be created. (CD)

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A FOLLOW-UP STUDY OF
AUDITORIALLY, VISUALLY,
AND ORTHOPEDICALLY
HANDICAPPED PUPILS IN
THE CINCINNATI PUBLIC
SCHOOLS

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CINCINNATI PUBLIC SCHOOLS

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HANDICAPPED PUPILS IN CINCINNATI

A Final Report
Presented to
The Cincinnati Board of Education
Cincinnati, Ohio

by
Richard Prisuta, Consultant
September 1, 1979
Office of Research and Field Services
University of Pittsburgh, Pittsburgh, Pennsylvania

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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FORWARD

The Division of Special Education of the Cincinnati Public Schools is grateful to Mr. Richard Prisuta and the Office of Research and Field Services of the University of Pittsburgh for the implementation of this study and the development of the final report. This report is extremely valuable because of its relevance to future educational planning for handicapped children. It is unique that it is the first comprehensive follow-up study of physically, visually, and acoustically handicapped individuals who have left the Cincinnati Public Schools.

Special acknowledgement is made of the extremely competent performance of the three visiting teachers, Melvin Russell, William Knoll, and Thomas Childs. Without the effort of these men the study could not have been completed. The Division of Special Education is also appreciative of the guidance and direction of Dr. James Mauch, University of Pittsburgh, in implementing and conducting the study.

It is hoped that this study will be the first of many evaluative processes that will lead to the improvement of the education of handicapped children attending the Cincinnati Public Schools.



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NATURE OF THE PROBLEM

An analysis of the adult adjustment status of a sampling of recent alumni was felt to be a basis for the construction of an improved curriculum for future auditorially, visually, and orthopedically handicapped pupils. Pupils involved in the present study are the finished products of special programs and their adequacy in the world of work is an indication of program validity and effectiveness.

Cincinnati's public schools have provided educational services for handicapped children for nearly one hundred twenty-five years. Two world wars resulted in major legislation in rehabilitation and special education through increased public empathy for the handicapped and the formal organization of parent groups. Leading educators in the Cincinnati schools responded to increased financial support, and for the past twenty years services at every level have grown continually in both quality and quantity.¹

It is advantageous to study the vocational adjustment of former disabled pupils in order to determine the effectiveness of special education programs. A research coordinator (the writer) and four visiting teachers were employed by the Cincinnati Board of Education to directly interview pupils that had completed or otherwise terminated their special education programs within the last three years. The writer requested that a more extensive study be done on pupils having terminated programs in the last eight years.

¹Special Staff Organized by the Midwest Administration Center, Supplementary Papers Cincinnati School Survey, Commissioned by Cincinnatians United for Good Schools, August, 1968, pp. 4-2 and 4-3.

Structured interviews were conducted and analyzed in terms of personal adjustment status of pupils, as well as incidence of employment, kinds of employment, income range, under-employment, non-employment, employer and employee attitudes, and other pertinent information. It was believed that this information would be valuable in program evaluation and planning. The Cincinnati Public Schools had not previously conducted a formal and extensive follow-up study of auditorially, orthopedically, and visually impaired pupils.

The writer was employed for two months to arrange this study and gather all necessary information. Visiting teachers were employed for two and a half hours after school each day and on Saturdays from May 1 to June 12, 1970 to make home visitations with former pupils and their employers. All visiting teachers were males and had been chosen on the basis of seniority. No attempt was made to employ interviewers specifically trained to communicate with deaf, blind, or crippled persons. The visiting teachers were requested to administer a single questionnaire to all three disability groups. Findings regarding personal adult adjustment of the deaf must be viewed in this light. The original intent, however, was to locate employers of disabled adults and acquire information from them.

The report and supplementary papers which comprised the Cincinnati School Survey of 1968 suggested that:

There has been no follow-up research on graduates of the Cincinnati Public Schools who enter the world of work. The result has been that the school system does not know how many graduated found employment, what types of employment were available to them, how many graduates actually were prepared for the jobs they took, and how well the vocational courses are adapted to actual jobs either in business or in industry.²

²Supplementary Papers Cincinnati School Survey, Op. Cit., p. 5-8.

RELATED RESEARCH

Considerable source material was reviewed relating to educational and vocational studies of handicapped people. It would be impractical in a study of limited nature to list every survey, study, or article from which ideas have been borrowed. Research ideas from studies conducted with former educable retarded pupils were found to be as useful as research directly related to deaf, blind, and orthopedically handicapped pupils and adults. The style used in reporting interview results was primarily that of Dr. Jack C. Dinger who originally formulated the questionnaires. The writer freely quoted portions from Dr. Dinger's analysis of questionnaires. Original questionnaires were slightly modified by insertions from an analysis of the questionnaires and reported results of follow-up studies by Dr's Peterson and Smith, Dr. Norman J. Niesen, and Dr. Donald D. Dauwalder. The writer deeply appreciates valuable assistance received from the Director of Special Education in Cincinnati, Ohio and his excellent staff (particularly Mr. William Penn, Supervisor) in acquiring the necessary information and providing direction.

Hearing impaired.--Recent research in the area of deafness has possibly been concerned with children who are deaf rather than the larger population of children who are hard of hearing. Psychological studies and modern technological advances in the area of communication have been increased. Studies of deaf adults have related to providing increased rehabilitation services and equal opportunity for utilization of community services.

Greater emphasis on the rehabilitation of deaf people has resulted in an increased number of research projects on the social and vocational aspects of deafness.

Boyce Williams (1967) summarized the basic needs of deaf people as follows:

to be understood
to be treated as individuals

to be held to the same standards of performance as their hearing peers
to be served by real professionals in all areas
to be allowed time to gain the tools for successful living
to be held equal, to be integrated
to achieve social maturity
to attain opportunities commensurate with capacities
to be accepted as full-fledged partners
to be given equal service opportunities
to replace attitudes of complacency and apathy among deaf people,
regarding attainment of vocational, social and educational
levels equal to hearing peers.

Hammermeister (1967) in a study of communication of deaf adults, followed up sixty deaf adults who had graduated between 1954 and 1960 from the Western Pennsylvania School for the Deaf. Prior to graduation the Stanford Reading Achievement Test was administered to each subject and the same form of this test was readministered to these subjects in 1967. Although no gains were detected in paragraph meaning, results indicated that significant gains were made in vocabulary meaning. The more intelligent students tended to make greater vocabulary gains.

Prince (1967) made personal observations of the communication patterns of fifty deaf males in their work settings. Of all the communication acts which he recorded, 38% were oral, 44% including gestures and sign languages were kinesic, 15% were oral and kinesic in combination, and less than 2% were written. It was noted that when many of the deaf workers were students they had poor prognosis for oral communication, yet on the job, they were reliant upon oral communication and seemed to use it effectively. Also of interest was the fact that few deaf adults relied heavily on pencil and paper for on-the-job communication. Many hearing fellow workers and supervisors were observed to be quite resourceful in communicating kinesically with

the deaf workers. The implication was that 1) language acquisition does not become static with graduation from school, and 2) restricted communication skills do not necessarily isolate deaf workers from their hearing peers.

Vaughn (1968) reported the results of a study designed to provide supportive services for both deaf and hard of hearing students in attendance at a college and a vocational school for the general population. He presented extensive data on the educational progress and occupational placement of students.

Rcsen (1968) studied the preferences of deaf college students regarding counselors with varying degrees of hearing. Twenty per cent of the subjects chose a deaf counselor. Four in five of the subjects preferred a counselor with normal hearing, a deaf counselor if necessary for adequate communication, or were impartial.

Rodda (1966) reported a study of twenty-three auditorially impaired students in England who had terminated their schooling. General background, occupational expectations and provisions, social adjustment and mobility, and personality organization were described. Results of interviews with students, their parents, and their teachers indicated that the pattern of adjustment was different than for non-handicapped students.

Lunde and Bigman (1959) provided a comprehensive survey of occupational conditions among 10,101 adult deaf. The greatest interest was in the printing trade, although 400 occupations were listed. Employment stability and job satisfaction were high.

Garrett (1964) surveyed 2,000 employers by mailed questionnaires in a pilot study of employment opportunities. Responses of employers from

large and small companies revealed no stated prejudices toward the hiring of deaf workers. However, deaf workers tended to seek out employment in larger companies. The author stressed a need for further research on employers of the deaf rather than on deaf employees.

Quigley (1964) reported that most deaf employees are engaged in skilled and semiskilled employment. Educational deficiencies, communication problems, lack of skills, and resistance of employers in accepted deaf workers were noted as barriers to finding employment.

Blish (1963) in a follow-up of deaf high school graduates, found that 96 or 85 per cent of the 113 students attended one or more schools with hearing students. Twelve took on-the-job training in normal hearing situations, and the records of five were not known. The need for higher education for deaf children was emphasized as well as the need to include the vocational agency and the parents in the guidance program for deaf children.

Visually Impaired.--A cursory review of the literature only partially explained how individual variables related to vocational success of the visually impaired. Much of the literature related vocational success to age of onset of blindness, degree of vision, I.Q. and educational achievement. These studies examined the relationship of these individual variables to some criterion measure such as employment status.

Buell (1956) investigated 358 former pupils of the California School for the Blind. Her findings indicated that approximately three-fourths of the students were gainfully employed, and one-fourth were working in subsidized occupations.

Knowles (1969) employed multivariate statistical procedures in studying groups of 245 successful and 210 unsuccessful cases. He found that orientation and mobility was the single most significant variable to differentiate between groups. The successful group tended to be younger, blind for a longer period of time, and had greater work experience prior to needing rehabilitation.

Dauwalder (1964), as part of a larger study, surveyed residential and day schools, industries, vocational rehabilitation offices, and other agencies serving the blind and partially sighted. He reported on current education and training programs, and both the competitive and sheltered employment of blind workers. His objective was to obtain nationwide information concerning the education, training, and placement of visually handicapped students and graduates. Recommendations were made which resulted in the strengthening of programs in industrial arts and vocational education at Western Pennsylvania School for Blind Children (W.P.S.B.C.). Information was obtained from records and questionnaires for more than 200 graduates of W.P.S.B.C. Additional data was obtained from direct interviews with a smaller sample of this group, a group of graduates of several other residential schools, and former pupils in three public school districts with large numbers of day school pupils. Analysis of his questionnaire provided data on physical, visual, and personal characteristics, educational and vocational history, attitudes toward employment, preparation for employment, and vocational services utilized. This study pointed up the need for schools and agencies to work with employers to increase the acceptance of visually handicapped workers and modify our industrial education programs to meet the requirements of the present and future.

Scholl, Bauman, and Crissey (1969) examined factors that contributed to the vocational success of a group of visually handicapped adults. Subjects were typically male, of ages between 23 and 42, of average intelligence, suffered visual loss at age 5 or less, and could not see sufficiently to read large print. Population included 939 subjects, of which 644 were interviewed and 207 were retested on various standardized measures. Initial data was obtained from school and agency records and updated from the subjects themselves. Results indicated (1) high percentage of unemployed; (2) employed subjects generally had an annual income below the median for the general population and (3) employed subjects were engaged in a narrow range of occupations. I.Q., sex, other disabilities, mobility, and level of education were variables which seemed to be most related to vocational success. Results of personality and vocational aptitude tests were not highly related to vocational success.

Orthopedically Handicapped.--Follow-up studies of orthopedically handicapped people seemed to be relatively rare and devoted to subjects from hospital schools and residential settings. Questionnaires and school records were utilized as primary sources of data. Summaries of several studies indicated considerable comparability of significant findings.

Brieland (1967) located and interviewed forty-one (77%) high school graduates of the Illinois Children's Hospital School. Thirty-seven graduates were interviewed; four who resided out of state completed schedules containing the same items and returned them by mail. A comparison of the interview and mail responses did not indicate any consistent differences. Unemployment rate for the group was 46 per cent. Judgments of graduates related to

various aspects of the school's program were of interest because the school was moving to a new building, making program changes possible. School records were examined. Focus was on employment, social participation, and self-feelings. This study also included results of a preliminary approach to the measurement of well being for the orthopedically handicapped.

Grego (1965) reported an extensive follow-up study which involved the Illinois Children's Hospital School. Examples of results related to employment indicated that: the greater the disability the less chance for employment; people with muscular dystrophy and congenital deformities had special employment problems; the orthopedically handicapped were less successful than the blind or mentally handicapped in obtaining employment; graduates who were employed had at least average intelligence, intelligible speech, and independent ambulation; the cerebral palsied group had the largest proportion of unemployed and unemployable individuals; the employment rate was higher for persons who had received special training following their general education.

Carlsen (1957) studied eighth grade and high school graduates. She also found that employed graduates had at least average intelligence, intelligible speech, and independent ambulation. Rate of employment for this group was relatively high

Other Related Studies.--Adjustment patterns of the mentally deficient population have been most often studied through the use of follow-up techniques. Subjective observation, structured questionnaires, interviews, and check lists were a few of the techniques used for the collection of data. Follow-up studies provided the data from which a variety of inferences have been drawn. For example, the development of employment predictability indices, establishment of the need for curriculum change, and the determina-

tion of a prognosis for successful adjustment of once institutionalized mentally retarded people.

Peterson and Smith (1960) reported a comparative adjustment study of a group of educable mentally retarded adults with adults of normal intelligence, but who had been judged to be of low economic status at the time they were attending secondary school. Each group consisted of 150 females and 30 males, with an age range of 21 years, 1 month to 31 years, 11 months. Mean I.Q. of the retarded group was approximately 65 and approximately 103 for the comparison group. The areas of investigation were: educational, work, home, family, social, and civic characteristics. The questionnaire consisted of 117 items which were administered to a total of 90 subjects.

The adjustment of mentally deficient adults was reported as inferior to that of the comparison group in several areas. Median wage of the retarded group was only 61 per cent of that of the normal group. This disproportionate wage was related to the following observations: the retarded group lived in below-average areas in substandard homes, fewer were homeowners, and there was a smaller proportion of married adults; the retarded group participated less in civic organizations, had a higher divorce rate, and committed a greater number of legal offenses. In total perspective, the retarded group demonstrated a high degree of adequacy and was equivalent to their mental superiors in many areas.

Dinger (1958) reported on the post-school adjustment of former special class mentally retarded pupils, in order to determine possible future revisions in curriculum. A random sample of 614 names was selected from the 1500 total names recorded in the special education files of former pupils of the Altoona

School District, Altoona, Pennsylvania. The sample was reduced from 421 subjects for whom a mailing address was located to 79.3 per cent or 333 of these who provided the following information: 83.2 per cent were employed (employed plus school plus full-time housewives), 12.9 per cent were unemployed, 4.8 per cent were deceased or their whereabouts were unknown. The sample was ultimately reduced to 144 persons who met the criteria of being employed and residing in the city of Altoona. The investigator made unannounced visitations to these 144 subjects, and included the first 100 subjects found to be at home in his final study population. This final group was visited and interviewed in their own homes, in order to observe their family living conditions and to secure a historical description of their educational, military, occupational, marital, financial, community, and leisure time activities, and to secure their opinions concerning the content of a proposed curriculum for retarded pupils.

Subsequent to the completion of home interviewing the investigator visited the employers of subjects in order to make individual job analyses in terms of employment procedures, job duties, required personal and academic characteristics, and the feasibility of such jobs for employment of future retarded pupils. An eight page guide was utilized for an industrial interview with employers. This questionnaire was a modification of the Job Analysis Form used by the United States Employment Service.

Adult retardates were found to be capable of successful occupational adjustment to unskilled and semi-skilled jobs which have few academic requirements. Occupational success was not highly related to differences in intelligence but reflected the possession of desirable personal characteristics by

the retarded worker. Retarded adults were reported to be capable of independent economic adjustment at a comfortable level. Social adjustment of the subjects was good, and Dinger felt the group was not immediately identifiable as being mentally retarded when judged on the basis of their appearance, homes, jobs, conversation, or dress. The wives and children of subjects were not significantly different from the wives and children of other people. Employers did not identify the majority of subjects as retarded adults. Dinger concluded: it is doubtful whether the criteria for the diagnosis of retardation in adulthood are the same as those used for this diagnosis in school age children. The question as to whether these adults are still "retarded" merits serious consideration.

Niesen (1965) investigated certain personal, social, family and occupational characteristics of educable mentally retarded pupils who graduated and those who did not graduate from the Cincinnati Public Schools' secondary special education program. Essentially this study determined if differences existed between graduated and non-graduated pupils in a variety of characteristics. Differences were noted between subjects during their school attendance period and during the post school period of adjustment.

Data was analyzed by the chi-square method to determine which observed differences were statistically significant at the .05 and .01 levels of confidence. Procedures for collection of data included a review of various school records, personal interviews with subjects, and the mailing of questionnaires to selected employers.

Selected examples of conclusions are:

- 1) During the period of school attendance graduates tended to reflect more favorable attitudes toward school, authority, work, group

activity, and other inter-personal relationships than did non-graduates.

2) Graduates and non-graduates showed less marked differences in personal, social, family, and occupational characteristics during the post-school period, than they had shown during the school attendance period.

3) Graduates were more employable than non-graduates, however, all employed subjects seemed to be capable of making satisfactory work adjustment in semi-skilled and non-skilled occupations.

PROGRAM DESCRIPTIONS

A brief description of the programs which prepared the three groups of subjects used in this study was believed to be of value in understanding certain results and recommendations which will be reported.

The Condon School.--In 1928 Condon School was organized to serve physically handicapped children who could not attend regular classes. A present enrollment of 240 includes children grades K-8 with disabilities due to poliomyelitis, cerebral palsy, muscular dystrophy, fractures, and other orthopedic conditions, such as heart disease. Classes are provided for physically handicapped children who are also Educable Mentally Retarded.

The following steps occur in the admission of a child: 1) recommendation by family and school physicians; 2) psychological testing and recommendation; 3) consideration of the child's needs and abilities in view of staff and facilities. Children ordinarily leave Condon when: 1) they are able to attend regular school; 2) they have finished the 8th grade; 3) the school facilities are inadequate to accommodate the child.

After grade 8 some students enter high school, some secure jobs, and some who are physically unable to adjust to work or school are provided with home instruction.

Approximately twenty students are enrolled per classroom; fifteen in classes for the Educable Mentally Retarded. There are thirteen teachers, one for each class; four physical therapists; one occupational therapist, three special subject teachers (music, art, and home economics); nine teacher aides; nurse; dentist; custodial and lunchroom staffs; part-time orthopedist and cardiologist.

Eleven buses provide home-school service.

Hot lunch is provided by the Board of Education at a cost to parents of thirty cents daily.

Five hospital classes exist for children confined to General and Children's Hospitals, and the Shrine Burn Unit. Home instruction teachers provide teaching to an average of eighty children during the year.⁴

Blind and partially seeing children.--A program for the visually limited was begun in 1905 with the opening of a class for the blind. Visually limited pupils are presently educated in much the same manner as sighted children, with necessary modifications in equipment and instructional methods.

Eligibility requires visual acuity of 20/70 or less in the better eye after correction, or that the child cannot read 18-point print at any distance, based on a current examination by an eye specialist. An annual eye examination is required for all children enrolled in the program. Visually limited children of school age with an intelligence quotient above 50, based upon an individual psychological examination, may be placed in the special education unit if they are capable of profiting from an educational program.

On the elementary school level, two types of programs are provided:

1) Children who require braille are enrolled in three resource room classes at Washington Park School, and Schiel School has one class for partially seeing children who require large print. 2) Elementary children who function in their own neighborhood schools and are visited by an itinerant teacher.

The Washington Park School program includes one class for visually limited pupils who are also slow learners.

⁴An Outline of the Organization and Program of Condon School, Cincinnati, Ohio.

At the secondary level, students are assigned to neighborhood schools and contacted by itinerant teachers. State funds are provided for readers, guides, and vocational rehabilitation services.

Teachers of the visually limited meet all requirements for certification as established by the Ohio State Board of Education.

All pupils are provided with such necessary equipment as braille-writers, large print typewriters, record players, tape recorders, magnifiers, and such tangible aids and materials necessary to their learning. Volunteers from the Cincinnati section of the National Council of Jewish Women provide all materials that cannot be purchased or borrowed elsewhere.

Free transportation is provided for eligible visually limited pupils in accordance with Ohio law and local Board of Education policy. Eligibility is based on pupil mobility, accessibility of bus service, and the pupils' emotional and social maturity.

After all children who are residents of the Cincinnati School District are placed, and provided that teachers are available, any other eligible pupils are accepted in the Cincinnati Public School program for the blind and partially seeing provided that: 1) the child is a resident of Ohio, and 2) the sending school district agrees to pay all costs and arrange transportation and/or boarding home placement.⁵

Deaf and hard of hearing children.--Deaf and hard of hearing children are eligible for appropriate programs based on the following criteria: 1) deaf--the child must have a mental age and a decibel loss of 70 or more in the better ear; 2) hard of hearing--the child must be of school age, and have a decibel

⁵The Cincinnati Program for the Visually Handicapped, Cincinnati Public Schools, Dept. of Administration and Personnel, Div. of Special Education, Cincinnati, Ohio, May, 1967, pp. 31-4.

loss of 50 or greater in the better ear. If staff members are available and all Cincinnati school district children are placed, other eligible children from other school districts will be admitted to the program.

Findings of the otologist, audiologist, school psychologist, and supervisor of the program are used to determine eligibility of children for placement.

Classes for the deaf are located in selected elementary and secondary schools. These classes are self-contained, except that children attend regular classes for physical education, art, crafts, and shop work. The school program is modified to meet the needs of deaf children through the development of skills in lip reading, speech, language development, and auditory training. Keys, charts, language outlines and other teaching materials are used in this program.

Hard of hearing children are enrolled in a variety of elementary and secondary schools. They participate in the regular school program and receive instruction in lip reading, speech improvement, language development, and auditory training.

Transportation facilities are provided free of charge to eligible students.

The Cincinnati Parent-Teacher Association of deaf and hard of hearing children and the Cincinnati Public Schools cooperate in presenting a program of parent education. The PTA publishes the Cincinnati Speech Reader, a journal devoted to the interests of children in the program.⁶

⁶The Cincinnati Public School Program for Deaf, Hard of Hearing, and Language Handicapped Children, Cincinnati Public Schools, Department of Student Development, Division of Special Education, 1969, pp. 1-3.

HEARING IMPAIRED SUBJECTS

A random sample of 275 names was taken from the 1375 total names in the Special Education files of former pupils of Cincinnati, Ohio for the years 1966-1970 (incl.). From this random sample a total of 33 subjects were selected by an arbitrarily chosen cutoff, which excluded those who were not born during the years 1946-1953 (incl.). City and suburban directories were used to locate a mailing address for each of the 33 subjects or their parents, which might be more current than those recorded in the Division of Special Education files. A cover letter and brief personal data questionnaire were mailed to the addresses which were located for each of the 33 subjects.

Sixteen (48.5%) of either these subjects or their parents completed and returned the questionnaires in the self-addressed stamped envelopes which were provided. The returned questionnaires revealed that one male subject had moved to Evanston, Illinois; another male had returned to the state of Wyoming with his parents; and, one female subject had moved to Kentucky. These re-locations of residence limited the door-to-door interview potential to 13 subjects. Addresses were located for two of five subjects whose questionnaires had been returned as non-forwardable. The writer utilized directories and established a telephone committee. This yielded the addresses of an additional 9 people. These search techniques raised the number of subjects who were able to be located and interviewed to 24 persons or 72.7% of the 33 originally chosen subjects. These 24 adults who were found to be residing in the Greater Cincinnati Area made up the final sample population of hearing impaired subjects and helped comprise the total study population. In other words, the total study population consisted of similarly drawn final samples from the visually

impaired and orthopedically handicapped groups of arbitrarily chosen subjects, in addition to, the final sample population of hearing impaired subjects whose selection has just been described. A description of the subjects in the other two disability areas and the procedure for their selection will be described under appropriate subheadings.

Two groups of hearing impaired subjects provided the information for this study: 1) the 16 subjects who completed and returned the brief personal data questionnaires⁷ and 2) the 24 subjects (includes 13 of the subjects in group one) who completed a ten page historically descriptive questionnaire⁸ during a visitation to their homes.

An analysis of the information received from the group (16 Ss) that returned the brief personal data questionnaires is provided in the descriptive data of Appendix C.

The following descriptive data was considered to be relative to the group of 24 hearing impaired subjects finally interviewed:

<u>Characteristics</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>
Number	13	11	24
C.A. Range	16-23 yrs.	19-24 yrs.	16-24 yrs.
C.A. Mean	20.71 yrs.	22.29 yrs.	21.43 yrs.
C.A. Std. Dev.	1.93	1.53	1.92
I. Q. Range	54-113	64-100	54-113
I.Q. Mean	91.23	81.73	86.88
I.Q. Std. Dev.	16.97	10.35	15.38

⁷See Appendix A for the cover letter and brief personal data questionnaire which was mailed to the total sample.

⁸See Appendix B.

⁹See Appendix D for additional descriptive data.

The narrow range of ages and the wide range in I.Q. for such a small sample of hearing impaired subjects would indicate that this group may not be representative of all young hearing impaired adults. Results should, however, be representative of the community adjustment for such a group, and therefore, significant to Cincinnati educators.

VISUALLY IMPAIRED SUBJECTS

Twenty-three names (23) were selected by birthdate cutoff (1946-53 incl.) from a random sample of 90 names. The random sample was taken from 450 total names in the special education files of Cincinnati, Ohio for the years 1966-1970 (incl.).

A cover letter and brief personal data questionnaire were mailed to the most current address which was able to be located for each of the 23 subjects in the group. Thirteen members of the group (56.5%) completed and returned the questionnaires. In the process of analyzing these forms, it was found that: One male subject is studying piano tuning in Batavia, New York; one female subject is attending a school in California; and, one subject is in Orient, Ohio at the Orient State Institute. Three of the 13 respondents, therefore, could not be visited at home for the purpose of completing a direct interview. In addition to the 10 subjects with whom a direct interview was possible, the writer located the addresses of 5 persons, bringing the number of possible home visitations to 15 or 65.2% of the originally selected group. These 15 subjects were all visited in their homes and made up the final sample population of visually impaired adults. Two related groups have been under consideration: 1) the 13 subjects who returned the brief personal data questionnaires, and 2) the 15 subjects who completed a questionnaire in their homes.

An analysis of the information received from the group of 13 Ss that returned the one page personal data questionnaires is provided in the descriptive data of Appendix E.

The following descriptive data¹⁰ was considered to be relative to the group of 15 visually impaired subjects finally interviewed:

<u>Characteristics</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>
Number	8	7	15
C.A. Range	16-22 yrs.	16-23 yrs.	16-23 yrs.
C.A. Mean	20.55 yrs.	20.39 yrs.	20.48 yrs.
C.A. Std. Dev.	1.77	1.30	1.57
I.Q. Range	59-136	69-116	59-136
I.Q. Mean	94.38	100.00	97.00
I.Q. Std. Dev.	17.83	16.31	17.36

¹⁰See Appendix F for additional descriptive data.

ORTHOPEDEICALLY HANDICAPPED SUBJECTS

A group of 74 orthopedically handicapped subjects was selected on the basis of date of birth (1946-1953 incl.) from a randomly chosen sample of 225 names which had been taken from 1125 total names kept in the files of Condon School for the years 1966-1970 (incl.).

Seventeen (17) of the 74 subjects who were selected for this portion of the study had moved from the Greater Cincinnati Area, leaving a maximum of 57 subjects who might be able to be located. From this group of 57 orthopedically handicapped persons the following contacts were established: 1) Eighteen (31.6%) of the group completed and returned a one page personal data questionnaire which had been mailed to them; and, 2) Thirty-four (59.6%) of the group were able to be located and visited in their homes. These 34 subjects made up the final sample population which helped comprise the total study population of subjects.

An investigation of the individual files for each of the 74 originally selected orthopedically handicapped subjects revealed that the following diagnoses were available for 71 numbers of this group:

<u>Disability</u>	<u>Frequency</u>
Meningocele	2
Spina Bifida	3
Cardiac	8
Cerebral Palsy	26
Antonic Diplegia	1
Congenital Deformities	3
Polio	18

<u>Disability</u>	<u>Frequency</u>
Post Polio	1
Scoliosis	1
Hydrocephalus	1
Christmas Disease	1
Paraplegia	2
Rheumatic Heart	1
Asthma	1
Muscular Dystrophy	1
Cerebellar Tumor	1

An analysis of the information received from the group of 18 Ss that returned the personal data questionnaires is provided in the descriptive data of Appendix G.

The following descriptive data¹¹ was considered to be relative to the group of 34 orthopedically handicapped subjects finally interviewed:

<u>Characteristics</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>
Number	17	17	34
C.A. Range	16-24 yrs.	17-24 yrs.	16-24 yrs.
C.A. Mean	21.68 yrs.	21.60 yrs.	21.64 yrs.
C.A. Std. Dev.	2.09	1.00	1.63
I.Q. Range	56-125	56-134	56-134
I.Q. Mean	94.88	83.88	89.38
I.Q. Std. Dev.	20.15	19.57	20.61

¹¹See Appendix H for additional descriptive data.

ALL SUBJECTS

An original selection of 130 names was made on the basis of date of birth from a random sampling of 590 total names. It consisted of hearing impaired, visually impaired, and orthopedically handicapped subjects. Of the 130 selected names, a total sample population of 73 subjects (56.2%) was able to be located and visited in the Greater Cincinnati Area. These 73 Ss made up the total study population, and 29 of this group (39.7%) met the criteria of being employed with a measurable wage. All 29 Subjects' employers were visited and interviewed.

PROCEDURE

Visiting teachers interviewed 73 subjects in their own homes in order to observe their family living conditions and to secure a historical description of the subjects in terms of their educational, military, occupational, marital, financial, social, and personal and home characteristics. Ten pages of questions provided interview consistency. The time required for home interviews ranged from 26 to 90 minutes. The questionnaire was intentionally designed to be lengthy and to contain valuable checks, such as the following, on answer validity: Number 2 under the subheading "occupation" can be checked in the last portion of number 6 under the subheading "education"; Number 7 under the subheading "occupation" can be checked in number 11; Numbers 3 and 6 under "education" are clarified by number 7.

Following the completion of home interviewing, a cover letter and three page employer questionnaire¹² was mailed to the employers of the 29 subjects who were found to be employed in the Greater Cincinnati Area. The three page questionnaire was mailed to the employers in order to permit the writer to acquire minimal information in event that an employer might not be willing to permit a direct interview based on an eight page industrial questionnaire.¹³ This eight page form was originally used by the United States Employment Service, and was later modified by Dr. Jack C. Dinger for use in

¹²See Appendix I for cover letter and three-page employer questionnaire form.

¹³See Appendix J for industrial questionnaire form.

his study of post-school adjustment of former educable retarded pupils. The writer acquired this form from Dr. Dinger for use in this follow-up study and made further modifications.

Appointments for interviews were arranged with each of the 29 subjects' employers. Each employer was visited in order to make a job analysis of each job held by the 29 subjects in terms of employment procedures, job responsibilities, working conditions, personal and academic characteristics, advancement possibilities, the feasibility of sponsoring training programs and employing similarly disabled persons in the future, and in terms of the employer's opinion of a designated procedure for providing the actual employment experiences in community and business firms. Three of the employer group failed to return the three-page questionnaire, nevertheless, the writer combined the findings from both questionnaires and adjusted for changes in the total number of responses when it became necessary.

Rather than have the visiting teachers record invalid responses to questions, they were instructed to leave questions blank if mutual understanding was lacking.

It should be mentioned that a procedural variation was necessary in interviewing the group of hearing impaired subjects. Visiting teachers were instructed to use the following procedure, or some adaptation of it, for communicating with these people:

1. Determine what the subject can do, for example, the reading of lips.
2. Determine what is mutually recognized to be yes and what is no.
3. Pantomime questions.
4. Write out explanations whenever it is necessary for the subjects to read the question in order to answer it.

5. If you cannot get an answer to the question, write this on the form.
6. Permit the subject to point to the answers if necessary.
7. Use facial expressions whenever possible.
8. Observe the face of the subject for comprehension level.
9. Allow parents or relatives to assist during communication.

RESULTS AND RECOMMENDATIONS FROM
INTERVIEWS WITH SUBJECTS

All findings summarized in this portion of the study are based upon seventy-three personal interviews conducted with hearing impaired, visually impaired, and orthopedically handicapped subjects who had graduated or otherwise terminated their education in the Cincinnati Public Schools. The findings are reported separately for each disability group but in each case they are reported under the following sections: Educational characteristics, military characteristics, occupational characteristics, marital characteristics, financial characteristics, social characteristics, and personal and home characteristics.

Results from Interviews with Twenty-Four
Hearing Impaired Subjects

Educational Characteristics.--1. Forty-six per cent (11 subjects) had some type of educational training since leaving the Cincinnati Public Schools, and 58.33% of the 24 Ss currently felt that students with problems which might prevent graduation from school should leave school before the age of eighteen. The eleven subjects with further educational training specified the types:

Learning at Goodwill Industries in Columbus, Ohio

Miller-Draughton for 6 mos. to become key punch operator

Miller-Draughton Business College for one year

Miller Business College for one year for typing and key punch

Miller-Draughton for key punch operator

Miller-Draughton College for two years

Auto Mechanic School at New York Technical for 8 months

Baptist Bible College in Grand Rapids, Michigan

One year at St. Rita School for the Deaf

Project Deaf, Columbus, Ohio

Three years of liberal arts at Gallaudet College, Washington, D.C.

2. For seventy-one per cent of the group, graduation was the main reason for leaving school. Other reasons for leaving school were: "work permit"; "age"; "wasn't satisfied"; "pregnant"; "hospitalized and still a patient"; "married before graduating."

3. Fifty-eight per cent of the group indicated that they would be in favor of returning to a class (majority preferred a day class) in order to better themselves, but only one person of those lacking a high school diploma indicated an interest in studying to take an examination to acquire one. Only 25 per cent of the 24 hearing impaired subjects felt that a high school diploma would be helpful in their present job.

4. None of the hearing impaired subjects had ever been fully enrolled in a vocational program; persons in this group were enrolled in special classes with varying degrees of integration in regular classes.

5. An analysis of group opinion regarding the teaching of specific job-related content to pupils who will leave school before graduation¹⁴ provided the following data:

¹⁴Refer to Appendix K for data representing the opinions of 80 educators and 26 employers regarding the teaching of such job-related content.

	Important	Not Important	No Response	Total
1) Learning about jobs available throughout the nation	18	5	1	24
2) Learning what is required to get and keep jobs	22	1	1	24
3) Skills needed for jobs (machines, etc.)	22	1	1	24
4) Measuring the aptitudes and abilities of each pupil to compare with these job requirements	19	4	1	24
5) Learning to work through having jobs in school	17	6	1	24
6) Learning to work having part time training in city	17	5	2	24

Military Characteristics.--1. The writer chose not to exclude the military service from this study despite the predictability of findings. No age-eligible auditorily handicapped males were ever in the armed services.

Occupational Characteristics.--1. Fifty per cent of the group found a job immediately after leaving school. The first jobs secured by these pupils were chiefly of the unskilled variety. A diversity of titles were represented:

- | | |
|-----------------------------------|--|
| 1) Assisting a cabinet-maker | 7) Laundry worker at Veterans Hospital |
| 2) Typist at Provident Bank | 8) Lab Technician at Veterans Hospital |
| 3) Meat cutter | 9) Worker at Association for Blind |
| 4) Stock boy | 10) Laundry boy at Christ Hospital |
| 5) Sewing for the Polk Company | 11) Worked for casket company |
| 6) Assisting grinders and welders | 12) Food server at Veterans Hospital in Dietary Department |

2. Seventeen per cent of the group had left their first jobs for desirable reasons as opposed to the 12.5% who quit because of reasons such as: the job was too hard, did not like the job, or the boss was unkind. Twenty-one per cent

of the group indicated that they had never left the first job secured.

3. Fifty per cent of the hearing impaired group are presently employed. The following descriptive data represents their present job responsibility their attitude toward this job, and each persons' opinion as to the type of work they would most like to be doing if they could have a choice of any job:

<u>Present Job Responsibility</u>	<u>Attitude</u>	<u>Occupation Desired</u>
1) Being clean and prompt in the dietary dept.	Likes job very much	Social Worker
2) Key punch operator	Likes her job very much	Job like I have now
3) Doesn't know (works for shoe company as loose heel seat nailer)	Likes job very much	Doesn't know
4) Correct cards; be on time	Likes job very much	What I am doing as a key punch operator
5) Typing; copying machine; makes out checks	Likes job very much	Office Work
6) Responsible for machine and keeping bread sliced	Likes job very much	Bakery
7) Kitchen work	Likes job very much	Present job
8) Filing system and general office work	Likes job very much	General office work
9) Runs dryer and runs washers	Fair liking for the job	Putting up dry wall
10) Being able to work on an assembly line	Fair liking for the job	Clerk
11) Meat cutting	Likes job very much	Doesn't know but likes his own work
12) Puts backs on books and pastes books	Likes job very much	Would take the same job

Those of the group who liked their present jobs all indicated that they liked them because of the type of people who work there and because they feel accepted. Those who found jobs and received a fair wage were satisfied to stay on their jobs. The writer is of the opinion that some of those subjects feel fortunate to have the jobs they have, and possibly are unaware of other job opportunities.

4. Twelve persons who are presently working secured their jobs in the following manner:

Friends or relatives	8
Office of Vocational Rehabilitation	1
Business College Placement Service	1
International Business Association	1
School and a friend	1

The school was not the sole agent to help any person of this group who is presently working.

5. Five former pupils (20.83%) have never worked. Of this group the following services were utilized (none of the group used all the available services):

<u>Service Utilized</u>	<u>No. Using</u>
Ohio State Employment Office	1
Letter of Application	1
Office of Vocational Rehabilitation	2
Phone Call	1

Marital Characteristics.--1. Twenty-five per cent of the group were married, and one woman was divorced.

2. The married 7 subjects had a total of 6 children. Only one of the 7 families had as many as 2 children, two had no children, and 4 had one child. None of the 6 children were enrolled in public or parochial schools. Of the 7 married subjects, four were 19 years of age at the time of marriage, the youngest was 17 years of age, and the oldest was 24. Five of the spouses of these married subjects had attended special education classes; four had graduated from high school; one attended college for 18 months; three were presently working and, one female subject reported her spouse cannot be located.

3. Suggestions of married subjects as to what boys should learn in school in preparation for the responsibilities of marriage were as follows:

<u>SUGGESTIONS</u>	<u>SUBJECT</u>	<u>COMMENTING</u>
1) How to look for a job, and get the extra training to qualify for a job		female
2) Cooking and general homemaking		male
3) No suggestions		female
4) A vocation		male
5) No suggestions		female
6) To support their family and make a home for them		female
7) How to keep a job		male

4. Suggestions of married subjects for the improvement of curricula in the areas of cooking, sewing, shopping, child care, general homemaking, and any area of personal concern were very poor in comparison to the suggestion of un-married subjects.

Financial Characteristics.--1. Fifty per cent of this group were entirely self-supporting. Each of these persons met the criteria of being employed.

Fifty per cent of the group indicated they were not entirely self-supporting, and the majority indicated that the remainder of their support came from parents. In individual cases, the spouse or grandparents had assumed financial responsibility, and one subject was currently receiving relief money.

2. Ninety-two per cent of the Ss have not received welfare help since leaving school.

3. Three (12.5%) of the spouses of these subjects are employed. This additional income was used for living expenses.

4. Fifty-four per cent of the group have saving accounts; 21% have checking accounts; 13% have charge accounts; 67% have life insurance; and 75% carry medical insurance such as Blue Cross.

5. One person in this group had made a loan since leaving school. The loan was from a bank for purchase of an automobile.

6. Sixty-nine per cent of this group lived in a home, and 29% resided in an apartment. The current place of residence for 75% of the group is in a home or rented by their parents; 21% rent their own home; and 2% pay to live with a friend.

7. According to the recorded observations of interviewers, the housing and furnishings of subjects were average or above average and only one of the homes was definitely below average (rating was due to lack of furnishings).

8. Subjects made curricular suggestions in the following areas of financial responsibility:

<u>Areas Suggested</u>	<u>Percentage</u>	<u>Most Frequent Comments</u>
Credit Buying	14	Watch not to get the wrong kind; find out what it is; how to handle credit buying
Savings	20	Where to save your money; save some each month; where we get the best interest on money

<u>Areas Suggested</u>	<u>Percentage</u>	<u>Most Frequent Comments</u>
Loans	16	Maybe have to get one; where and how to get one; how to buy a home
Insurance	18	How to save; why you should have it; different types of insurance
Budgeting	15	Everything about it; handling what they have

Social Characteristics.--1. Only six members of this group (25%) were currently registered to vote, and 4 of the six had exercised this civic function in the last election. Only 33% of the group contributed to various community drives such as Red Cross or the Community Chest, and 79% belonged to a church, but only 25% were active in a civic project that was beneficial to the community rather than to themselves. Forty-six per cent of the group belonged to a socializing type of activity such as a club, sport team or the P.T.A.

2. Only 25% of this group had ever lived outside the state of Ohio.

3. Fifty-four per cent of this group had a drivers license; 21% had committed a legal violation of the law, but these were all minor violations of the vehicle code and sentence was suspended subsequent to a small fine.

4. When the subjects in this group were asked what they believed to be the biggest problem in Greater Cincinnati, their responses were as follows:

Don't know	6
Did not answer	1
Place is a mess	1
Unemployment	1
Crime	2
Pollution	1
Stealing and fighting	1
More teenagers need more education	1
Getting employment	2

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Student permissiveness	1
Better bus service	1
Student unrest	1
Demonstrations	1
Violence	2
Poverty	1
City unrest - afraid to be out at night	1

Personal and Home Characteristics.--1. Seventy-five per cent of this group subscribed to the daily newspaper. The parts of the newspaper read the most were the front page and the sports section.

2. The local news was followed by 79% of this group and 67% followed it on television.

3. Twenty-nine per cent of this group subscribed to some type of magazine. "Life" was the magazine most preferred. Fiction was the most preferred type of book.

4. The greatest percentage of persons in this group never used the public library facilities.

5. Family type activities and the visiting of friends or relatives was no more popular with this group than socializing through activities such as clubs, teams, and movies.

The following percentages indicated the interest of the group in adult evening classes to learn:

<u>Classes Desired</u>	<u>No. of Subjects</u>	<u>Percentages</u>
Card games	3	12.5
Dancing	5	20.8
Sports	7	29.2
Hobbies	6	25.0
No Response	3	12.5

Totals

24

100.0

RESULTS FROM INTERVIEWS WITH FIFTEEN
VISUALLY LIMITED SUBJECTS

Educational Characteristics.--1. Sixty-seven per cent (10 subjects) had some type of educational training after leaving the Cincinnati Public Schools. Of the ten subjects, 9 had attended or were attending a college, and one person had completed the program at the Greater Pittsburgh Guild for the Blind.

2. Nine subjects or 60.0% of the group believed that students with problems which might prevent graduation from school should not leave school before the age of eighteen; the subjects who expressed their opinion were all graduates of various high schools.

3. For thirteen (86.7%) of this group, graduation was the main reason for leaving school. One subject left school because he "did not like it", and another subject was withdrawn by his parents who stated that "teachers could not get together with their son".

4. Sixty-seven per cent of the group indicated they would be in favor of returning to a class (majority preferred a day class) in order to better themselves. Only one person in the group indicated an interest in studying to take an examination for a high school diploma, but it must be kept in mind that 86.7% of the group had already received a high school diploma. Only 4 of the fifteen subjects indicated that a high school diploma would be helpful in their present job, but it must be noted that only 4 subjects were actually gainfully employed.

5. None of the visually limited subjects had ever been fully enrolled in a vocational program; the persons in this group spent an average of 7.5 years in special education classes.

6. An analysis of group opinion regarding the teaching of specific job-related content to pupils who will leave school before graduation provided the following data:

	<u>Content Area</u>	<u>Important</u>	<u>Not Important</u>	<u>No Response</u>	<u>Total</u>
1)	Learning about jobs available throughout the nation	12	3	-	15
2)	Learning what is required to get and keep jobs	14	1	-	15
3)	Skills needed for jobs (machines, etc.)	15	-	-	15
4)	Measuring the aptitudes and abilities of each pupil to compare with these job requirements	12	3	-	15
5)	Learning to work through having jobs in school	14	1	-	15
6)	Learning to work having part time training in city	12	3	-	15

Military Characteristics.--1. No age-eligible visually limited males were ever in the armed services.

Occupational Characteristics.--1. Forty-seven per cent of this group (7 subjects) found a job immediately after leaving school. The first jobs secured by these pupils were chiefly of the unskilled variety, and the following titles were represented:

1. Musician at a nightclub
2. Assembly line worker at the Cincinnati Association for the Blind
3. Assembly line worker at the Cincinnati Association for the Blind

4. Teachers' aide
5. Teachers' aide
6. Factory worker at NuTone
7. Receptionist for father and Red Cross volunteer

2. Twenty-seven per cent of the group had left their first jobs for desirable reasons. One subject quit his job because he was bored, and two subjects in the group have remained on their first job to the present time.

3. Twenty-seven per cent (4 Ss) of the visually limited group are presently employed. The following descriptive data was considered to be relevant for these subjects:

<u>Present Job Responsibility</u>	<u>Attitude</u>	<u>Occupation Desired</u>
1) Plays the organ and sings (musician)	Likes job very much	Music
2) Telephoning, keeping correspondence, running Xerox machine (clerical assistant)	Likes job very much	Something in sports field
3) Helps teacher prepare for class; takes care of children during teacher breaks (teachers aide)	Likes job very much	The job she already has
4) Be there promptly by 8:00 a.m. (bindry worker)	Likes job very much	Just what she is doing

4. The four visually limited persons who are presently working secured their jobs from friends or relatives with the exception that the Director of Special Education helped one female subject to find employment as a teachers' aide.

5. A total of 10 visually limited subjects have worked at one

time or another and they have made use of the following services:

<u>Services Utilized</u>	<u>No. Using</u>	<u>No. Helped</u>
Ohio State Employment Office	1	0
Office of Vocational Rehabilitation	5	4
Letters of Application	2	0
Phone call to apply for a job	6	3

Five subjects in this group (33.3%) have never worked; some of these subjects have utilized more than one of the aforementioned services but no person utilized them all.

Marital Characteristics.--1. None of the visually limited subjects who comprised the final study population were married. Nevertheless, opinions of single male and female subjects as to what the schools should teach boys in preparing them for the responsibilities of marriage were as follows:

Suggestion

- 1) Doing general home repairs like plumbing; electrical fixtures
- 2) Vocational skills and to think for themselves
- 3) How to get a job and hold it
- 4) Boys should know how to cook
- 5) Child care and budgeting
- 6) Consideration in marriage
- 7) Sharing in marriage
- 8) All the responsibilities of marriage
- 9) Child care, keeping a home in good condition, how to budget money, and how banks work

- 10) Planning for a family and how to use money
- 11) The economics of marriage, and schools should teach marital behavior
- 12) Child care and shopping techniques

Financial Characteristics.--1. Twenty per cent of this group were entirely self-supporting. Parents assumed the remainder of support for all other group members with exception of one subject who receives Aid for the Blind.

2. Forty-seven per cent of the group have saving accounts; 13% have checking accounts; 13% have charge accounts; 47% have life insurance; and 67% have medical insurance such as Blue Cross.

3. One person in this group has made a loan since leaving school. The loan was from a bank for the purchase of a musical instrument.

4. Eighty-seven per cent of the group lived in a home, and 13% resided in an apartment. Only one member of this group rented their own place of residence, all others resided in a home or apartment owned or rented by their parents.

5. According to the observations of interviewers, the housing and furnishings of the subjects' residences were average or above average and only one home was rated below average (rating was due to extremely poor furnishings).

6. Subjects made the following curricular suggestions, based on their life experiences, as to what schools should teach in the area of financial responsibility:

<u>Areas Suggested</u>	<u>Percentage</u>	<u>Most Frequent Comments</u>
Credit Buying	53	Don't overbuy - installment buying
Savings	40	Most interest for money
Loans	53	Interest rates; how interest to be charged and where to get one
Insurance	53	Different types; which is best insurance plan; what the contract means
Budgeting	40	Everything; very, very important to make your money last each month and buy the most; for a home and for marketing; get most for your money

Social Characteristics.--1. Four members of this group (27% were currently registered to vote, and none of them had voted in the election of November 5, 1968. Fifty-three per cent of the group contributed to various community drives such as Red Cross, and 66.7% belonged to church, but only 40% were active in a civic project that was beneficial to the community rather than to themselves. Seventy-three per cent of the group belonged to a socializing type of activity such as a club, sport team, or the P.T.A.

2. Only 27% of the group had ever lived outside the state of Ohio.

3. Only 7% (one member) of this group had a drivers' license, and this person had committed no major legal violation of the vehicle code.

4. When subjects in this group were asked what they believed to be the biggest problem in Greater Cincinnati, their responses were as follows:

Didn't Know	1
Incoherent answer	1
Student Unrest	3
Public transportation	1
Drugs	1
Crime	1

Lack of recreation for youth	1
Pollution	3
Cincinnati is too conservative	1
City government does not listen to the people	1
Cincinnati has a financial problem	1

Personal and Home Characteristics.--1. Sixty per cent of the group subscribed to the daily newspaper. The part of the newspaper read the most was the front page. One subject subscribed to the daily newspaper but admitted he did not read it.

2. The local news was followed by 93.3% of this group and 80% of the group indicated that radio and television were given equal consideration as the means of acquiring the news.

3. Forty-seven per cent of this group subscribed to some type of magazine. "Life" was the magazine most preferred by the group. Fiction was the type of book most frequently read.

4. Forty-seven per cent of this group indicated that they did not use the public library facilities very often. One person never used the public library but several persons indicated that they took advantage of these facilities at least once a week.

5. Leisure time was spent in socializing activities such as participation in clubs and sports to as great a degree as taking part in family activities and visitations with friends or relatives.

6. The following percentages indicated the interests of the group in adult evening classes:

<u>Classes Desired</u>	<u>No. of Subjects</u>	<u>Percentages</u>
Card Games	2	13.3
Dancing	1	6.7
Sports	2	13.3
Hobbies	3	20.0
No Response	7	46.7
	<hr/>	<hr/>
Totals	15	100.0

RESULTS FROM INTERVIEWS WITH THIRTY-FOUR
ORTHOPEDICALLY HANDICAPPED SUBJECTS

Educational Characteristics.--1. Forty-one per cent of this group have had some type of educational training since leaving the Cincinnati Public Schools. Of these 14 subjects, the following types of educational training were indicated:

Manpower Vocational for key punch operator for 18 weeks

Graduate of University of Cincinnati and presently at U.C. in graduate school

Cincinnati Industrial Institute for 5 weeks

University of Cincinnati for accounting

Automation Institute in Cincinnati for 7 months

Cincinnati Technical Institute for one week

College - 2 years and 5 months at Cincinnati School of Technology

I.B.M. School

William Gebhardt Art School for 3 years

Gebhardt Art School

Liberal Arts at University of Cincinnati for 8 weeks. Left because it was physically impossible to get around to classes and they would not let him stay on campus

Instruction at Goodwill Industries

Betsy Secretarial School and Stowe Adult Center

2. Sixty-five per cent of the 34 Ss comprising the group currently believed that students with problems (such as reading) which might prevent

graduation from school should leave school at or before the age of eighteen.

3. For 52.9% of the group graduation was given as the main reason for leaving school. One person left school because of inability to get around which led to obtaining a domestic permit. Two students left school because of age, although one was only 17 years old. Other singular reasons for leaving school were:

- 1) Graduation from Condon School for the Orthopedically Handicapped at age 16
- 2) Not capable of doing the work
- 3) "School told him not to come back"
- 4) "Did not go to high school and did not have any higher classes, but a student should not leave school"
- 5) "Too old" - 16 years of age and no program that was suitable after Condon School
- 6) "Physical" - beginning to affect his family and himself
- 7) Graduation from Junior High
- 8) Graduation from Condon
- 9) Too old.
- 10) Was not learning after two years in high school
- 11) Went as far as public education would permit (left Condon at age 16)
- 12) Too old for program at Condon
- 13) Heart trouble

4. Seventy-four per cent of the group indicated that they would be in favor of returning to a class (a slight majority preferred a day class) in order to better themselves, and 12 subjects (35.29%) were interested in studying to take an examination for a high school diploma. Seven of the 12

who would like to acquire a diploma preferred to do so by home study. None of the 12 showed a preference for night class. Only 10 of the orthopedically handicapped subjects (29.41%) felt that a high school diploma would be helpful in their present job, but it must be noted the 13 of the 34 subjects in this group are actually employed.

5. None of the subjects in this group were ever fully enrolled in a vocational program; 8.5 was the mean number of years spent by the group in special education classes.

6. An analysis of group opinion regarding the teaching of specific job-related content to pupils who will leave school before graduation provided the following data:

Content Area	Important	Not Important	No Response	Total
1) Learning about jobs available throughout the nation	25	8	1	34
2) Learning what is required to get and keep jobs	32	1	1	34
3) Skills needed for jobs (machines, etc.)	32	1	1	34
4) Measuring the aptitudes and abilities of each pupil to compare with these job requirements	27	6	1	34
5) Learning to work through having jobs in school	32	1	1	34
6) Learning to work having part time training in city	31	2	1	34

Military Characteristics.--1. No age-eligible orthopedically handicapped males were over in the armed services.

Occupational Characteristics.--1. Twenty-nine per cent of the group found a job immediately after leaving school. The first jobs secured by these pupils were chiefly of the unskilled variety. A diversity of titles were represented:

- 1) Assembly line worker at a store in Springdale, Ohio
- 2) Nurses Aide at United Cerebral Palsy Center
- 3) Shoe salesman (job held by student before graduating from high school and for the three months after leaving school)
- 4) Draftsman for water works
- 5) Package collector at department store
- 6) Private secretary to the Mother Superior of Sacred Heart Academy
- 7) Furniture duster
- 8) Arrange and bag bolts at the Cerebral Palsy Center
- 9) Worked at sheltered workshop in Batavia
- 10) Jewelry polisher

2. None of the orthopedically handicapped subjects left their first jobs for undesirable reasons, and 7 of the 10 who found work immediately after school, or 20.6% of the 34 subjects in the entire group are still on the first job at which they were employed.

3. Thirty-eight per cent (13 of 34 Ss) of the orthopedically handicapped group are presently employed. The following descriptive data represents their present job responsibility, their attitude toward this job and each persons' opinion as to the type of work they would most like to be doing if they could have a choice of any job:

Present Job Responsibility	Attitude	Occupation Desired
1) Polish jewelry	Fair liking for job	Social Worker
2) Sells Health and Life Maga-	Likes job very much	What he is doing, ex- cept possibly selling church books
(Actually selling magazines to a few friends a few days per month at 25¢ per copy and 45 copies per month)		
3) Billing, accounting, and typing	Likes job very much	Ceramic art studio
4) Knowledge of art, design, and photography, training in photo- retouching	Likes job very much	Same job
5) Arrange work on table, put bolts in bag, tie bag, weigh bags	Likes job very much	Homemaker
6) Teaching math	Likes job very much	Teach
7) Assist supervisor, key punch operator, fill out reports pertaining to job	Likes job very much	Computer field
8) Filing, Xerox machine, stamping envelopes	Likes job very much	Same job
9) In charge of color lab at studio	Likes job very much	Photographic work
10) Make sure layaways are picked up and shopping bags are put out	Fair liking for job	Anything that has to do with people
11) Quality control plant operator, vendor verifica- tion and applying statistics to quality of incoming materials	Likes job very much	Like the present job
12) Taking care of two machines; running the copy center when necessary; receiving and expediting documents	Likes job very much	Something in which I can do good
13) Keep customer in order; the taking of orders, collecting money	Fair liking for job	Babysitting

(This woman was employed for only two weeks by the Avon Company)

4. The thirteen persons who are presently working secured their jobs in the following manner:

Friends or relatives	6
Want ads	2
Office of Vocational Rehabilitation	2
School System	2
Other Means	1

One female subject explained that the University of Cincinnati graduates are usually able to work in the Cincinnati School System. One female subject acquired a job through the efforts of the counselor at Taft High School.

One male subject, self-employed as a free lance artist, attributed success in getting his present job to three years of schooling in art, help from a friend, and help from the Bureau of Vocational Rehabilitation.

5. Seven former pupils (20.6%) have never worked. Some of these persons utilized more than one of the following services (none of them used all the available services):

Service Utilized	No. Using.
Ohio State Employment Office	3
Office of Vocational Rehabilitation	4
Letter of Application	2
Phone Call	2

6. Twenty-seven of the 34 Ss have worked at one time or another regardless of whether they are currently employed. Only 13 subjects of the 27 who have worked are presently employed which indicates that 48% were unable to hold down a job for a diversity of reasons.

Of the 27 Ss who have worked, the following services were utilized (some persons used several services and 2 persons used them all):

<u>Service Utilized</u>	<u>No. Using</u>	<u>No. Helped</u>
Ohio State Employment Office	11	4
Office of Vocational Rehabilitation	19	7
Letter of Application	5	1
Phone call to apply for a job	12	4

One subject stated that all the above services were helpful in giving her a degree of preparation for the job when it did come along; for example interviews; knowing what kind of people companies employ and trying to sell yourself; knowing you can handle the job which is offered.

One subject (female) utilized all the above services and found none of them were helpful.

Marital Characteristics.--1. Twelve per cent (3 males and 1 female) of the group were married.

2. The married subjects had no children. Of the 4 married subjects, three were 23 years of age at the time of marriage, and the fourth person was age 20. One of the spouses of these married subjects had attended special education classes; two had graduated from high school; none had attended college; three were presently employed.

3. Suggestion of married subjects as to what boys should learn in school in preparation for the responsibilities of marriage were as follows:

<u>Suggestion</u>	<u>Subject Commenting</u>
1) Boys need to learn the same things as girls	female
2) Shopping, cooking; everything a woman knows	male
3) Same things as girls need to know	male
4) Budgeting and general information about household responsibilities	male

4. Married subjects felt that the areas of cooking, sewing, shopping, child care and general homemaking were very important inclusions in the school curriculum but they made no special comments or suggestions for curriculum improvement.

Financial Characteristics.--1. Twenty-four per cent of the group were entirely self-supporting, and all were employed. Only 2 of the four married subjects were self-supporting. The majority of the group received financial assistance from parents; state aid for the handicapped, established bank account allowances, and social security were also notable in providing additional financial support.

2. A maximum of 6% have ever received welfare help since leaving school.

3. Three of the 4 spouses of these subjects are employed. This additional income was used for savings in one case and for living expenses in other instances.

4. Fifteen per cent of the group have checking accounts; 53% have savings accounts; 18% have charge accounts; 65% have life insurance; and 65% carry medical insurance such as Blue Cross.

5. Four persons, who were not self-supporting, took loans from a bank. Three of these Ss purchased a car and one paid off his bills.

6. Seventy-nine per cent of this group lived in a home, and 18% resided in an apartment. The current place of residence for 82% of the group is in a residence owned or rented by their parents; 15% rented their own residence and one person was hospitalized.

7. According to the recorded observations of interviewers, the housing and furnishings of subjects were average or above average with the following exceptions; three homes were rated below average on the basis of

cleanliness, repair, and insufficient furnishings.

8. Subjects made curricular suggestions, based on their life experiences, in the following areas of financial responsibility:

<u>Areas Suggested</u>	<u>Percentage</u>	<u>Most Frequent Comments</u>
Credit Buying	65	How to budget salaries before buying on credit; buting with care; how to get the real price considering interest and with no interest
Savings	74	How to budget to save; where to get the most interest; importance of regular saving; the value of bonds
Loans	65	When to get loans; proper budgeting before taking out loans; loans with care; from whom and what payments cost; interest rates
Insurance	68	What good insurance is; best kind for family and oneself; how to read policies carefully; being adequately, but not over-insured; types
Budgeting	68	The fundamentals; how to regualte salaries; more should be taught exactly how to do a budget; to plan items in order of priority

9. One hospitalized subject was unable to continue the interview after a dhort time and did not complete the financial history or subsequent sections.

Social Characteristics.--1 Only 7 members of this group (20.6%) were currently registered to vote, but it is noteworthy that all 7 subjects voted in the last election. Fifty per cent of the group contributed to various community drives; 68% belonged to a church but only 18% were active in a civic project beneficial to the community rather than to themselves. Forty-one per cent of the group belonged to a socializing type of activity such as a club, sport team, or the P.T.A.

2. Only 12% of this group had ever lived outside the state of Ohio.

3. Thirty-five per cent of this group had a drivers' license and and 9% had committed a minor violation of the Vehicle code. One member of

the group had been confined for a legal violation of the law.

4. When the subjects in this group were asked what they believed to be the biggest problem in Greater Cincinnati, their responses were as follows:

Didn't know	7
Did not answer	2
Unconcerned	1
Housing	1
Campus Controversy	1
Violence and destruction (riots)	3
Pollution	4
Racial	2
Social problems	3
Lack of jobs	1
Lack of youth activities	1
Transportation	2
Vietnam	1
Inefficient schools	2
Physical barriers for the handicapped	1
Need a high school for the handicapped	1
Need Special Education and experimental programs for educationally disadvantaged children	1

Personal and Home Characteristics.--1. Seventy-four per cent of this group subscribed to the daily newspaper. The part of the newspaper read the most was the comic section.

2. The local news was followed by 59% of this group and the most popular means of following the news was on television.

3. Forty-seven per cent of this group subscribed to some type of magazine. Fashion magazines were the type most preferred. Adventure novels were the most popular type of book.

4. The greatest percentage of persons in this group never used the public library facilities.

5. Family type activities and visiting friends or relatives were the most popular leisure time activities.

The following percentages indicated the groups' interest in adult evening classes:

<u>Classes Desired</u>	<u>No. of Subjects</u>	<u>Percentages</u>
Card games	2	5.9
Dancing	1	2.9
Sports	2	5.9
Hobbies	13	38.2
No Response	16	47.1
Totals	34	100.0%

DATA RESULTING FROM INTERVIEWS WITH 29 EMPLOYERS OF
HEARING IMPAIRED, VISUALLY LIMITED, AND
ORTHOPEMICALLY HANDICAPPED SUBJECTS

1. The great majority of jobs presently held by subjects from each disability group was classified by employers as semi-skilled.
2. Fifty-two per cent of the employer group reported that the minimum age for employment at their firm was 18 years, however, 20.7% would hire a 16 year old drop-out.
3. The over-all work rating of employees in comparison to other employees would place 50% in the top quarter; 42% in the second quarter; 4% in the lowest quarter.
4. Eighty-six per cent of the employee group completed an application form and 79.3% of the group were interviewed before being hired.
5. Only 20.7% of the firms required any previous experience for employment on the jobs currently held by subjects, but 44.8% of the firms indicated that various types of screening tests were used to select employees. One employer required a special license (teacher's certification) as a prerequisite to consideration for employment.
6. Of the 29 employers, only 10.3% indicated that a high school diploma was necessary for employment within their firm; 17.2% of the employers indicated that a high school diploma would be preferred for the following specific job titles: Teachers, key punch operators, cashiers, and inside ring polisher. Thirty-five per cent of the employers, when

pressed for an educational grade level, indicated that a "tenth grade" education would suffice, whereas the range of employer opinion revealed that some firms tend to hire persons with no education to grade 12 level.

7. When asked to indicate the preferred sex for each employee's job title, 48% of the employers showed no sex preference for jobs, however, the following specific sex preferences were noted:

<u>EMPLOYEES' JOB TITLE</u>	<u>MALE PREFERRED(X)</u>	<u>FEMALE PREFERRED (XX)</u>
Wrapper Helper	X	
Billing Clerk		XX
Key Punch Operators		XX
Inside Ring Polisher	X	
Extractorman	X	
Food Handler		XX
Inspector (Receiving)	X	
Bookbinder	X	
Loose Heel Seat Nailer	X	
Teacher's Aide		XX
Box Spring Supplier	X	
Commercial Photographer	X	

8. Sixty-two per cent of the employees had developed the vocabulary skills required on several kinds of jobs and 62% had developed the accuracy for successful performance on several types of jobs.
9. Fifty-nine per cent of the employees were able to cope with complex methods used in the scheduling of work.
10. Sixty-nine per cent of the employed former pupils always did their share of work without close supervision.

11. Employers revealed that 90% of the employed subjects had learned to assume responsibility for taking directions and seeing the job through to completion when supervision was provided. Employers indicated who had the direct responsibility for supervision of an employee on a specific job and the following data reveals the method by which this was done:

<u>JOB TITLE</u>	<u>SUPERVISOR</u>	<u>METHOD OF SUPERVISION</u>
Key Punch Operator	Department Supervisor	Observation and demonstration
Extractorman	Laundry Foreman	Training
Bookbinder	Supervisor	Observation and demonstration
Inspector (Receiving)	Supvr. Quality Control	Discussion
Food Handler	D.N.A.	D.N.A.
IBM Punch Operator	Girl with whom she works	Through writing
Loose Heel Seat Nailer	D.N.A.	Observation and demonstration
Teacher	D.N.A.	Observation
Key Punch Operator	Supervisor	Demonstration
Teacher's Aide	Teacher	Observation
Box Spring Supplier	Foreman	Observation and demonstration
Commercial Photographer	Owner Worksheet	-----
Assembler	Supervisor	Demonstration
Clerk-typist	Supervisor	Written
Clerk	Secretary	Word of mouth
Bindery Worker	Supervisor	Observation and demonstration
Cashier	Departmental Supervisor	Observation and demonstration
Clerical Assistant	Supervisor	Observation, demonstration, and lecture

Freelance Artist	D.N.A.	D.N.A.
Piece Worker	General Assistants	Observation and demonstration
Key Punch Operator	Supervisor	Observation, demonstration, and lecture
Work Activity Center Client	Workshop assistance and instructor	Observation and demonstration on the job
Food Service Worker	Immediate Supervisor	Demonstration
Musician	Manager	Lecture
Billing Clerk	Warehouse mgr., office mgr., and owners of company	Lecture
Wrapper Helper	Shift Foreman-Plant Foreman	Demonstration and lecture
Inside Ring Polisher	Department Head	Observation and demonstration
Package Collector	Assistant Manager	Observation and demonstration
Clerk	Mail Supervisor	Observation and demonstration

Note: Some employers were reluctant to answer this portion of the questionnaire and admitted that close supervision was either entirely lacking, due to the nature of the job, or considered a minor responsibility to be meted to an individual as needed.

12. While 51% of the employer group said they would dismiss a new employee after two or three months of unsuccessful adjustment, 70% of the group stated that they would permit a new employee a probationary period ranging from two months to a year before dismissal for inefficiency or slowness.
13. Each employer was asked to clarify the level of efficiency which must be reached on each employee's job and the unanimous reply was "Satisfactory Progress According to Company Standards." If the writer had

anticipated this answer the industrial questionnaire would have included a series of questions aimed at the basis for each firms ratings of employees.

14. When employers assessed the personal characteristics of disabled employees in comparison with other employees of their firms, this group of adults received the following ratings:

<u>CHARACTERISTICS</u>	<u>% ABOVE AVERAGE</u>	<u>% AVERAGE</u>	<u>% BELOW AVERAGE</u>	<u>TOTAL %</u>
Personal Grooming	39.0	61.0	----	100.0
Courtesy to Others	46.0	50.0	4.0	100.0
Desirable Reaction to Criticism	42.0	50.0	8.0	100.0
Memory for Directions or Procedures	42.0	58.0	----	100.0
Ability to Handle Responsibilities	35.0	61.0	4.0	100.0
Work Effort or Energy	58.0	42.0	----	100.0
Neatness in Work Area	58.0	42.0	----	100.0
Attention to Company Rules and Regulations	61.0	31.0	8.0	100.0
Getting Along with Other Employees	61.0	39.0	----	100.0
Being Late for Wrok	46.0	50.0	4.0	100.0
Work Attendance Record	81.0	15.0	4.0	100.0
Quality of Employees' Work	54.0	46.0	----	100.0
Quantity of Employees' Work	42.0	54.0	4.0	100.0

Some of these are characteristics which the deaf, blind, and crippled are stereotyped as lacking while in school.

15. Only 6.9% of the employee group had filed a claim for Workmen's Compensation. Employer files on claims for accidents verified that only two employees had filed claims.
16. Fourteen per cent of the employee group hold membership in an organized labor union and membership in the union was required for exactly 14% of the group. The amount of time permitted to join a particular union ranged from 30 days to 90 days, and the fee ranged from \$5.00 for the AFL-CIO textile workers to \$50.00 for Local 213 ABC. Dues ranges from \$4.00 to \$6.00 per month.
17. For each employee's job title, the employer specified those personality requirements needed:

<u>EMPLOYEE'S JOB TITLE</u>	<u>STABILITY</u>	<u>MANNERS</u>	<u>APPEARANCE</u>	<u>DISPOSITION</u>
Key punch operator	very stable	average	important	important
Extractorman-tumblerman	average	average	important	important
Clerk	average	outstanding	important	important
Clerk-typist	average	average	important	important
Assembler	average	average	unimportant	important
Commercial photographer	average	average	important	important
Box spring supplier	very stable	outstanding	unimportant	important
Teachers' Aide	average	average	important	important
Key Punch operator	very stable	average	important	important
Teacher	very stable	outstanding	important	important
Loose heel seat nailer	average	average	unimportant	important
Punch operator IBM	average	average	important	important
Bookbinder	average	average	important	important
Inspector (receiving)	very stable	average	unimportant	important

<u>EMPLOYEE'S JOB TITLE</u>	<u>STABILITY</u>	<u>MANNERS</u>	<u>APPEARANCE</u>	<u>DISPOSITION</u>
Food handler	very stable	outstanding	important	important
Bindery worker	average	average	important	important
Cashier	very stable	average	important	important
Clerical assistant	average	average	unimportant	important
Freelance artist	very stable	outstanding	important	important
Piece worker	average	average	unimportant	important
Key Punch operator	stable	average	important	important
Work activity center client	very stable	outstanding	important	important
Food service worker	average	average	important	important
Musician	very stable	outstanding	important	important
Billing clerk	very stable	outstanding	important	important
Wrapper helper	very stable	average	important	important
Mail clerk	very stable	average	important	important
Pkg. collector	average	average	unimportant	important
Inside ring polisher	average	average	unimportant	important

It is interesting to note that employers are well satisfied with the employees in this study and that employees were able to meet employer expectations regarding personality requirements such as emotional stability and appearance. For those subjects not presently employed but who have been employed at some time, it would have been interesting to interview their former employers to see if these subjects possessed comparable attributes.

17. For each employee's job title, employers were requested to specify the regular duties and responsibilities of the job as well as any supplementary duties which might be performed occasionally. Twenty examples of job descriptions as indicated by each of 20 employers were selected

for inclusion in Appendix L as being the most descriptive and complete for purposes of this study.

18. Employers were asked to give their opinion as to the importance or non-importance of following a specific five-stage procedure in providing the "student-trainee" with a variety of actual employment experiences in community business firms. The following percentages represent employer responses:

<u>PROCEDURE</u>	<u>IMPORTANT</u>	<u>NOT IMPORTANT</u>	<u>TOTAL PERCENTAGE</u>
1) Locate a business firm which has the kind of peration and supervision necessary to provide adequate training jobs for the student.	82.8	17.2	100.0
2) Convince the employer of the value of a job training program to both the business and the student. The employer should accept each student-trainee for a short period of training.	69.0	24.0	93.0
3) Evaluate the student-trainee's progress through personal observation by the work study coordinator and the employer, and self-evaluation by the student. This would be provided for through the completion of weekly rating forms.	55.1	37.9	93.0
4) Establish the student-trainee in a total of four job training experiences of short duration.	51.7	44.8	96.5
5) Employer's final evaluation and writing a letter of recommendation for the student-trainee, which greatly facilitates the securing of employment after completing school.	75.8	17.2	93.0

19. When employers rated the frequency of the use of skills such as driving a vehicle, telephoning, working with money, handling tools, or having good customer relationships, the majority of employers reported that such skills were not used at all or were used very infrequently.

20. The great majority of employees was trained on-the-job by experienced fellow workers or by the supervisor's instructions and demonstrations.
21. Seventy-six per cent of the employee group had received wage increases since beginning their present job; this was evident from the wage difference between beginning salaries and current salaries. Forty-five per cent of the employee group were receiving wage supplements such as bonus, uniforms, room, meals, and travel expenses. Only 34.5% of the group were getting overtime.¹⁵

Gross wages (overtime included) ranged from \$500 to \$80000 per year and the average yearly wage for the group was \$4373:

<u>WAGE INTERVALS</u>	<u>FREQUENCY</u>
\$ 0- 999	2
1000-1999	1
2000-2999	0
3000-3999	7
4000-4999	8
5000-5999	5
6000-6999	2
7000-7999	0
8000-8999	2
Varying Wages	<u>2</u>
total	29

Precise data was available regarding the wages of twenty-seven of the 29 employees in the group and those employees were included in an analysis of the correlation between wages and IQ and between wages and chronological age.

¹⁵See Appendix M for information regarding beginning salaries of employees, wage supplements and increases and how determined, and the rate for overtime.

There was a positive correlation coefficient of .49 between wages and IQ and a correlation of .41 between wages and chronological age. The writer would have preferred an N of 30 designating a large sample and realizes that the variables are spurious and based on chance, nevertheless, a moderate relationship between variables can be considered. The following descriptive data was considered to be relevant:

<u>JOB TITLES OF EMPLOYEES</u>	<u>ESTIMATE OF ANNUAL GROSS WAGES</u>	<u>I.Q.</u>	<u>C.A.</u>
1) Package Collector	\$ 4160.00	81	21.42
2) Inside Ring Polisher	4680.00	70	21.25
3) Mail Clerk	3776.00	99	24.42
4) Wrapper Helper	8000.00	90	21.17
5) Key Punch Operator	5200.00	88	23.17
6) Extractorman-Tumblerman	4716.00	96	23.00
7) Clerk	4000.00	83	23.08
8) Clerk-typist	3840.00	87	24.33
9) Assembler	3120.00	64	23.08
10) Commercial Photographer	4800.00	96	24.25
11) Box Spring Supplier	6000.00	91	19.83
12) Teacher's Aide	3640.00	82	21.92
13) Key Punch Operator	5200.00	92	23.58
14) Teacher	8000.00	134	24.42
15) Loose Heel Seat Nailer	4600.00	106	21.58
16) IBM Punch Operator	3536.00	85	24.17
17) Bookbinder	4500.00	107	23.33
18) Inspector	6000.00	115	20.92

19)	Food Handler	\$3500.00	65	21.75
20)	Bindery Worker	Varies (Piecework)	108	21.67
21)	Clerical Assistant	4775.00	77	22.75
22)	Free Lance Artist	Varies	105	23.92
23)	Piece Worker	600.00	56	20.42
24)	Key Punch Operator	3900.00	85	20.25
25)	Work Activity Center Client	500.00	61	18.33
26)	Food Service Worker	5668.00	54	20.58
27)	Musician	1040.00	86	20.50
28)	Billing Clerk	5072.00	107	23.42
29)	Cashier	5252.00	100	23.50

22. In the opinion of their employers, 41% of the employee group had no job advancement opportunity.
23. Seventeen per cent of the employee group had jobs which required no reading ability and 52% of the jobs required reading skills of a very simple nature. An analysis of employer responses as well as specific word examples revealed that employees were required to read memos and notes, bulletin boards, labels, directions on machines, inventory sheets, and printed tags and signs in that particular order of frequency.

Only 6.9% of the employee group are required to perform any writing function other than to fill in data, tally marks on printed forms in repetitious situations or perform a simple writing function such as signing a check or completing an application form. An analysis of employer responses revealed the following specific writing functions required in employee positions:

<u>WRITING FUNCTION</u>	<u>PERCENTAGE OF GROUP</u>	<u>DESCRIPTIVE INFORMATION</u>
Signing name (where)	51.7	various forms on worksheets time clock and time cards for "leave" request registered mail Xerox requests quality control authorizations, indicating inspection performed time book
Completing forms	34.5	data processing application and loading request for printing order forms all types of forms inventory forms freight bills daily production record
Writing Reports	3.4	quality control reports
Filling in printed forms	31.0	warehouse releases printing requests time sheets - work logs time card facsimile report
Tallying marks on forms	20.7	on bread bags and prices on work sheets on mail reports simple addition sheets numbers completing a job on tickets received

24. The following percentages are indicative of the number of employees expected to perform specific mathematical functions as a portion of their job responsibility:

<u>MATHEMATICAL FUNCTIONS</u>	<u>PERCENTAGE OF EMPLOYEES</u>
None	24.1
Counting only	17.2
Addition only	20.7
Subtraction	24.1
Addition and Subtraction	37.9
Multiplying	31.0
Dividing	31.0
Fractions	20.7

Using "Ruler" or "Tape Measure"	20.7
Decimals	17.2
Percentages	13.8
Money	6.9
Pay or Wages	0.0
Taxes	3.4
Complex Functions	3.4

Sixty-two per cent of the group have no arithmetic process to perform higher than addition.

25. When each employer was asked to specify other job titles in the subjects' job area requiring similar academics and skills, 86% could not provide the requested information.
26. Only 38% of the 29 firms in this study who employed former special education pupils were willing to sponsor a job training program for the occupational training of either hearing impaired, visually limited, or orthopedically handicapped students; however, 76% of the employers were willing to consider special education pupils for employment after they had completed a training program.

CONCLUSIONS AND RECOMMENDATIONS

The majority of former hearing impaired, visually limited, and orthopedically handicapped pupils of the Cincinnati Public Schools are capable of successful occupational adjustment to unskilled and semi-skilled jobs. Nevertheless, the majority of disabled adults in this study have at some time been employed but are currently not self-supporting and are dependent upon their parents. They are victims of impractical school experiences which were not marketable enough to provide economic stability. This statement was made only after applying the following formula to the subjects of each disability group in the study to determine whether financial investments for education and training were yielding proper results:

(Mean No. of Yrs. in Sp. Ed. Per Pupil Per Group) X (Estimated Annual Program Expenditure Per Pupil Per Group)

The total current expenditure per crippled pupil at Condon School for the year ended June 30, 1969 was \$1884.00. The average number of years spent at Condon School was 8.5 for subjects in this study. If the current annual expenditure is used as a basis for calculation, the total estimated expenditure for educating a crippled pupil at Condon was \$16,014.00. Of the 34 Ss in this study for which this amount was paid for the purpose of permitting each pupil to reach his or her maximum potential, only 13 Ss (38%) are presently employed.

An estimated \$2,517.00 was spent annually to educate each of the 24 hearing impaired subjects in this study for a mean number of 10.5 years,

and therefore, an estimated total expenditure of \$26,429.00 was made to educate and train each subject. Fifty per cent of the hearing impaired subjects are presently employed.

Visually limited subjects were educated at an estimated annual cost of \$2,289.00 for a mean number of 7.5 years and at a total cost of \$17,168.00 per pupil. Of the 15 Ss in this group, only 4 (27%) are presently employed.

Group socialization was a stronger characteristic of the entire sample population than the writer had expected and those subjects who have remained in the Greater Cincinnati Area are not at odds with employers or fellow employees and seem to be quite aware of community problems. There was no specific evidence of labeling or discriminatory behavior on the part of subjects' employers. Employers appeared to make reasonable demands upon disabled employees and approximately three-fourths of them were willing to consider pupils with similar disabilities for employment provided the schools had sufficiently trained them for the job.

The administration should improve their relationships with all professional agencies and with those agencies capable of assisting former pupils who are unemployed. The school should assume more responsibility for the occupational placement of disabled pupils after they have completed their training. The first few months of employment should be looked upon as part of the school program. None of the former pupils in this study had been specifically trained in a vocational program for a specific job and none of them were placed solely through the efforts of the school. Those programs observed by the writer were primarily academic in nature.

Almost half of the employed group of subjects had no job advancement opportunity, without further training. This was primarily because the

nature of their jobs required no arithmetic process to perform higher than addition and extremely limited opportunity to perform reading or writing skills. It appears that contented employees on jobs requiring limited communication and computational skills were destined to stay in low-level positions.

Intelligence and job seniority are generally considered to be positively related to job success as measured by wages, however, these variables cannot be viewed as the major criteria of job success. Employers indicated that personal characteristics such as desirable reaction to criticism, getting along with other employees, being late for work, memory for directions, work effort, and attention to company regulations were the primary requisites for occupational success.

Special education teachers, vocational educators, and industrial arts personnel should be provided with a copy of the results of this study in order to develop more complete long term concepts of various disabled adults performing as workers and citizens. Active team participation in the formulation of questions prior to subsequent studies, and in the implementation of suggestions from the present study would benefit the curriculum.

The follow-up study indicated the employer had a low tolerance level for the basic sources of human error such as carelessness and indifference, however, he was prepared to remedy situations caused by ignorance, confusion and work pressures. The individual was expected to know reasonably well what he was supposed to do, preferably in terms of the end-product. He was expected to have a clear understanding of his basic responsibilities and duties and their limitations.

The scope of the pre-vocational training program must be expanded to augment the employer; receptivity to established objectives and to meet

changing demands in the labor market and in the school system. Corrective action must be taken to eliminate or avoid the negative features caused by obsolescence or the disadvantages of inadequate implementation. Emphasis must be placed on the need to know in advance what the employer expects should be accomplished and what will constitute good performance.

The Cincinnati School System has the management, methods, funds, facilities and materials to develop a dynamic program of vocational education for the business community. The following pre-requisites are offered for consideration:

1. Gather facts and information about the technical and managerial problems that concern the prospective employer of the disabled.
2. Establish programs, plans and procedures which develop the individual's knowledge of job requirements and provide information to the employer regarding problems inherent in the employment of the disabled.
3. Distribute a curriculum guide to explain and interpret pre-vocational programs so that the employers interest and enthusiasm is developed and maintained.
4. Analyze the existing student-trainee programs and revise them to include better general education for the vocationally oriented in order to relate to the employer's specialty.

The following suggested procedure provides the disabled student with a gradual adjustment to the world of work as well as an opportunity for exposure to a variety of employment settings. It also provides the vocational instructor with an objective means of evaluation:

1. Locate a business firm which has the kind of operation and supervision necessary to provide adequate training jobs for the student.

2. Convince the employer of the value of a job training program to both the business and the student. The employer should accept each student-trainee for a short period of training.

3. Evaluate the student-trainee's progress through personal observation by the work-study coordinator and the employer, and self-evaluation by the student. This would be provided for regularly through the completion of rating forms.

4. Establish the student-trainee in approximately four job training experiences of short duration.

5. Employer's final evaluation and writing of a letter of recommendation for the student-trainee, which greatly facilitates the securing of employment after completing school.

An on-the-job training program exists for E.M.R.'s, however, access to this program is not ordinarily available for the students involved in this study. The students involved in this study were primarily trained, if anything, to go on to college or to receive more training. Recently efforts toward a more symbiotic relationship between vocational-education and special education in Cincinnati indicates the possible development of a prototype for other large city systems in Ohio and elsewhere.

In the existing vocational programs for special students there is a dropping out of students somewhere between the elementary grades and grade 12, due to leaving school, switching programs, moving, etc. This situation leaves few students who survive from original work study program indoctrination to completion of upper level vocational-education programs, and causes ineffective use of funds and manpower. There appears to be a real need for:

- 1) specific program objectives which pair specific skills with specific job

opportunities as based on actual employment situations of former pupils;

- 2) determination of the exact level at which subjects who do not continue in the work study program are leaving the program;
- 3) justification for the inclusion of disabled groups in vocational programs based on their positive individual assets and on need rather than costs;
- 4) abolishment of independent vocational programs instructed by special education teachers;
- 5) more numbers of students to fill the great number of jobs available and reduce the current possibility of placing students on a variety of jobs before they are totally prepared.

The varied programs (due to greater total incidence of deaf, blind, and crippled pupils) of the city school system tend to serve the entire Greater Cincinnati Area, the county as well as the city. The level of state financial support in proportion to the cost of special education places Cincinnati in an unfavorable financial position. The state should revise the financial reimbursement formula to pay a larger proportion of the total cost of these programs. The heavy financial burden presently being borne by the Cincinnati Public Schools can be shared by the county school system which has the legal and operational capability to conduct special educational programs.

Vocational education should be decentralized from Courter Technical High School to truly comprehensive local high schools. The implementation of vocational-education programs for disabled pupils should be primarily the responsibility of vocational-education officials with cooperation and assistance from the Department of Special Education.

APPENDIX A

COVER LETTER AND BRIEF PERSONAL DATA QUESTIONNAIRE

CINCINNATI PUBLIC SCHOOLS
Division of Special Education
230 E. Ninth Street
Cincinnati, Ohio 45202

May 1, 1970

Dear Former Student,

A study is being made to find out what has happened to you since leaving school. Very often, we educators lack information about the achievements of our former students. The number of students being contacted is small, so please prevent the failure of this study by answering the question sheet and returning it in the addressed, stamped envelope.

We would deeply appreciate your information, since you are the only people who can help us in changing these programs for other students.

All answers will be treated as confidential, and will be used only by those persons directly involved in the study.

Thank you very much for your help.

Very truly yours,

Richard Prisuta

Richard Prisuta,
Coordinator

RP:jw
enc. 2

CINCINNATI PUBLIC SCHOOLS
Division of Special Education
230 E. Ninth Street
Cincinnati, Ohio 45202

FOLLOW-UP STUDY

Note: Parents and other responsible parties are requested to fill in the form if former pupil is not available!

1. Name _____ 2. Phone _____
3. Present Address _____
4. Is the address unknown, Yes _____ No _____ 5. Deceased, Yes _____ No _____
6. Date of Birth _____; Age is _____ years _____ months
7. Yr. began public school _____; Yr. left _____; Yrs. in Spec. Ed. classes _____
8. Did you attend high school _____ How long _____; Did you graduate _____
9. Chief reason you left school _____
10. Are you in school somewhere, Yes _____ No _____; Unemployed, Yes _____ No _____
11. Are you a full-time housewife, Yes _____ No _____
12. Are you now employed in the Cincinnati area, Yes _____ No _____
Where _____
What is your job _____
How long employed there _____ Hourly Salary _____
13. Did you find work immediately upon leaving school, Yes _____ No _____
Who helped you get this job? _____
14. Number of jobs since graduation _____ Best salary _____
15. Did Public School programs give the needed special training for doing a job after leaving school, Yes _____ No _____
16. Did you receive special training for any job after leaving public school, Yes _____ No _____; Describe this training program _____

5/1/70
S-1

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APPENDIX B

TEN-PAGE HISTORICALLY DESCRIPTIVE QUESTIONNAIRE

May, 1970

CINCINNATI PUBLIC SCHOOLS
Division of Special Education

FOLLOW-UP STUDY
Home Interview Questionnaire

EDUCATION:

1. Have you had any educational training since leaving the Cincinnati Public Schools?
yes _____ no _____; If yes, what type, how long, and where _____

2. Age at which you began school _____ Age left school _____
3. Name of last school attended _____
4. Course of Study in Secondary School: _____
General Special Vocational
5. Number of years spent in Special Education Classes _____
6. Did you attend high school? yes _____ no _____ where _____
How long? _____ Receive high school diploma, yes _____ no _____
What year? _____
7. Main reason why you left school _____
Graduation Work Permit Domestic Permit
Age Other
8. At what age should students leave school if they will not graduate due to trouble
with reading, etc.? _____
16 17 18 19 20
9. Would you return to school or go to some class where you might learn a skill
helpful in getting a better job? yes _____ no _____
10. What type of class would you prefer: _____
Day Night Vocational Trade Other
11. If it were possible, would you be interested in studying to take an examination
for a high school diploma? yes _____ no _____; _____
Home Study Night Class Other
12. Would a high school diploma help you in your present job? yes _____ no _____
13. Give your opinion of teaching the following to pupils who will leave school
before graduation:

3. (continued)

	Important	Not Important
Learning about the jobs available throughout the nation	_____	_____
Learning what is required to get and keep jobs	_____	_____
Learning skills for various jobs (machines, etc.)	_____	_____
Measuring the aptitudes and abilities of each pupil to compare these with job requirements	_____	_____
Learning to work through having jobs in school	_____	_____
Learning to work by part-time training in the city	_____	_____

MILITARY SERVICE:

1. Ever in the Armed Services? yes _____ no _____; Branch _____
2. Length of time spent in the service _____
months
3. Highest Rank _____
4. Most Important Job _____
5. Experience in Foreign Service, yes _____ no _____; where _____
6. Combat, yes _____ no _____
7. Honorably Discharged, yes _____ no _____
8. Go to any schools while in the Service, yes _____ no _____; if yes, what type
of school? _____ How long? _____
9. Was military service your first job experience? yes _____ no _____
10. Would you recommend the service as a career to a person just out of school?
yes _____ no _____ why _____

OCCUPATION:

1. Did you find a job immediately after leaving school? yes no

2. Year in which you took your first job after school _____

3. Title of the first job you held after leaving school _____

Who did you work for? _____

Why did you leave this job? _____
Fired (Why), Illness, Better Job, Quit (why),

Other (specify) _____

4. Please give information about other jobs held:

	<u>Employed By</u>	<u>Job Title</u>	<u>Duties</u>	<u>Dates Worked</u>	<u>Reason for Leaving</u>
a)					
b)					
c)					
d)					
e)					

5. Working now? yes no

List things that make up your present job responsibility:

a) _____

b) _____

c) _____

Special training for this job, yes no ; Describe _____

How long at your present job? _____
months

6. Name of present employer or company _____

Address of employer _____ Phone, if known _____

Occupation (continued)

7. Who helped you get your present job? _____
Want Ad Friend Relative

School (explain) Community Agency (specify) Other (specify)

8. Do you like your present work? _____
Very Much Temporary Job Fair Dislike It

Why do you feel this way? _____

9. Present wage being paid: \$ _____ per _____

10. If you had your choice of any job, what type of work would you do? _____

Why? _____

11. Did you ever make use of:	Yes	No	Did This Help In Getting A Job?
Ohio State Employment Office	_____	_____	_____
Office of Vocational Rehabilitation	_____	_____	_____
Letter of Application to Company	_____	_____	_____
Phone Call to Apply For a Job	_____	_____	_____

FINANCIAL HISTORY:

1. Are you entirely self-supporting? yes _____ no _____ If not, who assumes the remainder of support (spouse, parents, relief, other) _____

2. Currently receiving A.D.C. or Welfare help, yes _____ no _____ which _____ . Have you ever received Welfare help since leaving school? yes _____ no _____ .
3. If spouse is employed, how is this additional income used? _____

4. Do you have: Checking Accounts, yes _____ no _____
 Savings Accounts, yes _____ no _____
 Charge Accounts, yes _____ no _____
 Life Insurance, yes _____ no _____
 Medical Insurance
 (Blue Cross, Other) yes _____ no _____
5. Have you ever made a loan since leaving school? yes _____ no _____
If yes, for: _____
 Car Home Other
If yes, from whom: _____
 Commercial Loan Bank

 Private Person Other
6. Your present home is: _____
 Owned by You Rented by You Owned by Parents

 Rented by Parents Other
It is: _____ ; It has _____ rooms.
 Home Apartment Number
7. What more do you think pupils should be taught concerning money matters before leaving schools for jobs?
Credit Buying _____
Savings _____

Financial History (continued)

7. (continued)

Loans _____
Insurance _____
Budgeting _____
Other _____

FOR INTERVIEWER TO OBSERVE:

a) Housing: _____
Average Above Average Below Average
b) Furnishings: _____
Average Above Average Below Average

For Ratings of Below Average, state in what terms:

Housing: _____
Cleanliness Housekeeping Furnishings Repair
Furnishings: _____
Cleanliness Housekeeping Furnishings Repair

SOCIAL FACTORS:

1. Do you belong to: _____
Church Club Sport Team Other
2. Do you have a driver's license? yes _____ no _____; Any restrictions? _____

3. Have you ever committed a legal violation of the law? yes _____ no _____
Nature of the offense _____
Result of the offense _____
Referred Confined Jailed
Suspended Sentence
4. Did you vote in the last election? yes _____ no _____
Presently registered to vote? yes _____ no _____
5. Ever lived outside the State of Ohio? yes _____ no _____
6. Are you a member of any group organization? _____
P.T.A. Card Club
Dance Club Fraternal Order Other
7. Did you give to any community drive? _____
None Red Cross
Community Chest Other
8. Do you help in any civic projects such as Boy Scouts, Recreation leagues, etc.?
(Specify) _____
9. What do you believe is the biggest problem in Greater Cincinnati today? _____
Next biggest problem _____

PERSONAL AND HOME CHARACTERISTICS:

1. Do you subscribe to any magazine? yes _____ no _____; which? _____

2. Do you get a daily newspaper? yes _____ no _____; which? _____

What part of the newspaper do you read most?

3. What news do you follow? _____
Local State National World None

Do you follow the news by _____
Talking Newspaper Radio TV

4. What do you spend most of your time reading? _____

5. Type of: Magazine Preferred _____
Book Preferred _____

6. How often do you use the public library facilities? _____

7. Tell about any group activities your family might take part in (visiting friends or relatives, picnicing, clubs, teams, movies, etc.) _____

8. Would you be interested in adult evening classes to learn:

Card Games _____ which _____ Hobby _____ which _____

Dancing _____ type _____ Other _____ specify _____

Sports _____ which _____

Signed _____
Signature of Person Responding to Questions

Former Pupil or Relationship _____

APPENDIX C

DESCRIPTIVE DATA FROM BRIEF PERSONAL DATA QUESTIONNAIRES

Four males and one female or 31.3% of the group were enrolled full or part-time in schools of various types. One hard of hearing female could be classified as a full-time housewife. Full-time housewives and persons in school without a job paying a cumulative wage were classified as part of the "Unemployed" group.

<u>Status</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>	<u>Percent</u>
Deceased	-	-	0	0.00
Address Unknown	-	-	0	0.00
Unemployed	5	2	7	43.8
Employed	5	4	9	56.2
Totals	10	6	16	100.0

Ten (10) men and 6 women comprised the group of subjects in this portion of the study. Nine (9) of these people were deaf and 7 were hard of hearing.

Eight males and 6 females (75%) graduated from high school and the mean number of years of attendance for graduates was 5.7.

Six or 37.5% did not find work immediately upon leaving school. Likewise, 6 did find work immediately after leaving school. Twenty-five per cent of this group did not answer the question. One man and one woman were assisted by the Office of Vocational Rehabilitation. One girl reported help from special education teacher and another received help from her minister. Otherwise, former pupils helped themselves or were assisted by relatives in finding work.

Four males and three females or 43.8% indicated they had never worked and 43.8% indicated they had held two or more jobs since leaving school. Two females (12.5%) reported having one job since leaving school.

Four persons (1 male and 3 females) or 25% felt that the public school program gave the needed training for doing a job after leaving school, but 7 males and 2 females or 56.3% felt that the public school did not. Three persons did not answer the question.

Four people indicated they had received special training for some type of job after leaving school and, of the four, all gave coherent descriptions of their training program. Three persons did not answer the question, and 9 persons (56.3%) reported no training for any job since leaving school. Of the 4 who received special training after they left school, 3 females found jobs in the following areas for which they had been trained: 1) typing IBM cards 2) IBM operator; and 3) key punch operator. One male was being taught to sort mail in the post office and had not finished his training.

APPENDIX D
ADDITIONAL DESCRIPTIVE DATA

HEARING IMPAIRED SUBJECTS
Final Study Population (24)

SEX	BIRTHDATE	C.A.	I.Q.	FUNCTIONING AS DEAF (x)	FUNCTIONING AS		HEARING		LEVEL
					H of H	(xx)	R	L	
Female	4/27/48	22.25	80	x			95+		100+
Male	5/18/49	21.17	90	x			100		99
Female	4/21/51	19.25	100		xx		68		52
Male	12/31/49	20.58	54		xx		75		75
Female	4/26/50	20.25	85		xx		80		75
Female	8/29/49	20.92	95	x			98		97
Male	9/23/53	16.83	90	x			76		76
Male	6/23/53	17.08	92	x			95		91
Male	4/11/48	22.25	113	x			100		100
Female	7/8/47	23.00	73	x			85		71
Female	3/1/46	24.33	87	x			NR		NR
Female	6/3/47	23.08	64			xx	60		62
Male	9/28/50	19.83	91			xx	54		62
Male	12/19/49	20.58	112	x			102		105
Male	9/28/50	19.83	61			xx	48		57
Male	8/19/49	20.92	85			xx	95		98+
Male	12/18/48	21.58	106			xx	77		62
Female	5/9/46	24.17	85	x			100		100
Female	10/22/48	21.75	65	x			85		85
Female	7/23/47	23.00	77			xx	45		45
Male	2/24/57	23.33	107	x			100		100
Male	7/22/47	23.00	96	x			81		81
Male	4/12/48	22.25	89	x			95		95
Female	5/25/47	23.17	88	x			95		95

APPENDIX E
AN ANALYSIS OF PERSONAL DATA QUESTIONNAIRES
FROM THIRTEEN
VISUALLY IMPAIRED SUBJECTS

The following descriptive data was significant for the group of 13 subjects who returned the brief personal data questionnaires:

<u>Status</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>	<u>Percent</u>
Deceased	-	-	-	00.0
Address Unknown	-	-	-	00.0
Unemployed	4	5	9	69.2
Full-time Housewife	-	-	-	00.0
Employed	2	2	4	30.8
Totals	6	7	13	100.0

<u>Status</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>	<u>Percent</u>
Never Worked	4	5	9	69.2
One Job	1	2	3	23.1
Two or more jobs	1	0	1	7.7
Totals	6	7	13	100.0

The group of subjects who responded by mail consisted of 9 blind and 4 partially seeing individuals. Eleven persons in this group or 84.6% had at least attended high school for a mean number of 3.7 years. Nine persons or 69.2% of this group were graduated from a high school in 4.1 mean number of years. Twelve of the 13 in the group (92.3%) reported that they did not find work immediately upon leaving school, and only 2 persons in this group acquired their job through a community agency.

One blind female was able to find work immediately after leaving school. The director of the program for visually limited students helped her find this job. The Ohio State Services for the Blind placed one female subject at the Clovernook Printing House after she had completed a personal

adjustment program at the Greater Pittsburgh Guild for the Blind. Vocational Rehabilitation assisted one male subject in finding work as a clerical assistant at the U.S. Public Health Service.

Four former pupils in this group (2 males and 2 females) or 30.8% felt that the public school program provided the special training needed for doing a job after leaving school, but six persons or 46.2% felt that it did not. Three persons were not sure or did not know how to answer this portion of the questionnaire.

Six members of the group indicated that they had received special training for a particular type of job after leaving school, and 5 of the 6 gave coherent descriptions of their training programs. Seven members of the group indicated that they had no training of any kind in helping themselves get a job. One male and one female subject indicated that they had taken no special training, but both were enrolled as sophomores at the University of Cincinnati. Their responses were considered to be incoherent. Of the six who indicated some type of post-school training only one of these persons was employed in the area for which he had been trained, and four persons indicated they were still in the process of being trained.

APPENDIX F
DESCRIPTIVE DATA FOR THE
FINAL SAMPLE POPULATION OF
FIFTEEN VISUALLY IMPAIRED Ss

VISUALLY LIMITED SUBJECTS
Final Study Population (15)

SEX	BIRTHDATE	C. A.	I. Q.	BLIND (X)	P. SIGHTED (XX)	DIAGNOSIS	VIS. ACUITY (cc) O.D. O.S.
Female	10/12/49	20.75	116		xx	Bilateral Iritis	20/100 L.P.
Male	1/2/50	20.50	86	x		RLF	NLP NLP
Female	11/14/53	16.67	69		xx	High Myope Nystagmus	20/100 20/100
Female	7/17/48	22.00	106	x		RLF	NLP NLP
Female	2/8/50	20.42	105		xx	Retinitis Pigmentosa	20/80 20/100
Male	11/3/47	22.67	82	x		RLF	_____
Male	1/1/50	20.50	93	x		Retinoblastoma	H.M. at 1 ft. Emuc.
Male	10/1/47	22.75	77	x		High Myope RLF	2-/200 L.P.
Female	11/19/48	21.67	108	x		Bilateral Eucleation	
Male	9/1/50	19.83	136	x		Optic Atrophy	F.D. at 3 ft.
Male	11/15/53	16.67	59			Aphakia, Strab., Nys.	20/60 20/60
Female	8/7/48	21.92	82	x		Priphitiscal Adv. Chorio Retinitis	NLP NLP
Male	1/15/50	20.50	88	x		Cong. Ny. Strabismus	20/200 20/200
Male	7/16/49	21.00	124	x		RLF	Prosthesis NLP
Female	2/24/51	19.55	114		xx	Myopia Cpd. Astig.	20/200 20/200

APPENDIX G
AN ANALYSIS OF BRIEF PERSONAL DATA QUESTIONNAIRES
MAILED BY ORTHOPEDICALLY HANDICAPPED SUBJECTS

An analysis of the 18 questionnaires mailed in by orthopedically handicapped subjects revealed the following descriptive data:

<u>Status</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>	<u>Percentages</u>
Deceased	-	-	-	00.0
Address Unknown	-	-	-	00.0
Unemployed	5	4	9	50.0
Employed	5	4	9	50.0
Totals	<u>10</u>	<u>8</u>	<u>18</u>	<u>100.0</u>

Four (22.2%) of the 18 subjects in the group were enrolled full or part-time in various types of schools. None of the females in the group were full-time homemakers. Thirteen (72.2%) of the group attended high school for a mean number of 3.6 years. Nine males and 3 female subjects (66.6%) graduated from high school and the mean number of years of attendance for the twelve who graduated was 3.8.

Four males and 6 females or 55.5% of the group did not find work immediately upon leaving school. Five males and 1 female or 33.3% of the group did find work, and two members of the group did not answer the question. One male subject had been to a Vocational Rehabilitation Center; a mother got her son a job collecting packages in a department store; and, the owner of a commercial studio encouraged one male high school graduate to complete a two year course in a school of commercial art, and subsequently hired him. One female subject was eventually placed by the Bureau of Vocational Rehabilitation, and another indicated that she became a volunteer for a Red Feather Day Care Center when she was unable to find employment. One female in the group remained unemployed until she sought advice from her former special education teacher, who referred her to the Cerebral Palsy Center Workshop.

Two male and 4 female subjects (33.3%) indicated they had never worked since leaving school; 3 males and 4 females or 38.9% had one job since leaving school; and, 5 males or 27.8% had held two or more jobs since leaving school.

Four subjects (22.2%) felt that the public school program provided the special training needed for doing a job after leaving school, and 7 males and 6 females or 72.2% of the group felt that the public school did not train people for entering the world of work. One person could not answer the question.

Eight subjects (44.4%) indicated that they had received post-school training for some type of job, and each of them gave coherent descriptions of their training program. One subject did not answer this question; and, 9 subjects (50%) had received no training whatsoever for a job since leaving school. Of the eight subjects with post-school training, all eight (6 males and 2 females) found jobs in the area for which they had been trained.

APPENDIX H
ADDITIONAL DESCRIPTIVE DATA RELATIVE TO FINAL SAMPLE
POPULATION (34) ORTHOPEDICALLY
HANDICAPPED SUBJECTS

ORTHOPEDEICALLY HANDICAPPED SUBJECTS

Final Sample Population (34)

<u>Sex</u>	<u>Birthdate</u>	<u>C. A.</u>	<u>I. Q.</u>	<u>Diagnosis</u>
Male	6/4/46	24.08	96	Meningocele
Male	2/13/49	21.42	81	Cerebral Palsy
Female	2/10/47	23.42	107	Polio
Male	9/23/49	20.83	73	Cerebral Palsy
Female	1/26/50	20.50	72	Cerebral Palsy
Male	12/11/49	20.58	76	Congenital Cardiac
Male	6/12/46	24.08	71	Spina Bifida
Female	3/24/52	18.33	61	Muscular Dystrophy
Female	8/26/51	18.92	100	-----
Female	5/25/46	24.17	62	Cardiac
Male	10/18/50	19.75	125	Cerebral Palsy
Female	2/18/50	20.42	56	Cerebral Palsy
Male	4/14/49	21.25	70	Cerebral Palsy
Male	9/11/46	23.83	116	Cerebral Palsy
Male	8/27/46	23.92	105	Cerebral Palsy
Male	11/9/49	20.67	94	Cerebral Palsy
Female	4/26/46	24.25	70	Antonic Diplegia
Female	9/1/49	20.83	107	Cerebral Palsy
Female	2/11/46	24.42	99	Congenital Deformities
Male	5/1/51	19.17	124	Polio
Female	6/10/47	23.08	83	Cerebral Palsy
Male	4/28/46	24.25	96	Polio
Male	1/11/50	20.50	113	Cerebral Palsy
Female	12/30/46	23.58	92	Polio
Female	2/21/46	24.42	134	Polio
Male	10/8/53	16.75	56	Cerebral Palsy
Male	4/1/48	22.25	97	Polio
Female	8/14/48	21.92	69	Hydrocephalus
Female	10/23/50	19.75	72	Congenital Cardiac - Scoliosis
Female	5/17/49	21.33	82	Cerebral Palsy
Female	8/1/49	20.92	71	Cerebral Palsy
Female	7/28/53	17.00	89	Spina Bifida
Male	8/13/49	20.92	115	Christmas Disease
Male	5/18/46	24.33	105	Cerebral Palsy

APPENDIX I

COVER LETTER AND THREE-PAGE EMPLOYER QUESTIONNAIRE

Cincinnati Public Schools
Division of Special Education
230 E. Ninth Street
Cincinnati, Ohio 45202

Attention: Personnel Department

Date: May 27, 1970

For Information: 621-7010 Ext. 368

Dear Sir:

A follow-up study is being made to determine the present situation of selected pupils. Employers are the only people who can help us in changing programs for other employable students and the number of employers being contacted is small. Please take a few minutes to prevent the failure of this study by answering the questionnaire and returning it in the addressed, stamped envelope.

We are seeking information on the person whose name appears at the bottom of this letter and on the questionnaire. All information will be regarded as confidential.

Thank you very much for your cooperation.

Very truly yours,

Richard Prisuta

Richard Prisuta
Coordinator

Information Request on:

Cincinnati Public Schools
Division of Special Education
230 E. Ninth Street
Cincinnati, Ohio 45202

FOLLOW-UP STUDY

Questions pertain to _____
(First) (Last)

This employee should be rated or compared to other employees of your company. All information will be kept strictly confidential.

1. The job this employee performs is _____
(Title)
2. The job the employee performs is _____
Highly Skilled

Requires Some Training Non-Skilled
3. The employees' hourly wage for this job is: _____
4. The employee:
_____ always does his/her share of work without close supervision
_____ usually does his/her share of the work
_____ frequently does less than a fair share of work
5. The over-all work rating of this employee in comparison to other employees would place him in: _____
Top Quarter Second Quarter Third Quarter

Lowest Quarter
6. This employee's possibility for promotion is: _____
Excellent

Fair Poor
7. Would you hire other employees with similar strengths and weaknesses?
Yes _____ No _____

8. Employer comparisons of this employee with the majority of other employees, in terms of:

Item	Above Average	Average	Below Average
A. Personal Grooming	_____	_____	_____
B. Courtesy to Others	_____	_____	_____
C. Desirable Reaction to Criticism	_____	_____	_____
D. Memory for Directions or Procedures	_____	_____	_____
E. Ability to Handle Responsibilities	_____	_____	_____
F. Work Effort or Energy	_____	_____	_____
G. Neatness in Work Area	_____	_____	_____
H. Attention to Company Rules & Regulations	_____	_____	_____
I. Getting Along with Other Employees	_____	_____	_____
J. Being Late for Work	_____	_____	_____
K. Work Attendance Record	_____	_____	_____
L. Quality of Employees Work	_____	_____	_____
M. Quantity of Employees Work	_____	_____	_____

9. Give your opinion of teaching the following to handicapped pupils who will leave school before graduation:

	Important	Not Important
Learning about the jobs available throughout the nation	_____	_____
Learning what is required to get and keep jobs	_____	_____

Follow-Up Study

9. (cont.)

Important

Not Important

Learning skills for various jobs (machines, etc)

Measuring the aptitudes and abilities of each pupil to compare these with job requirements

Learning to work through having jobs in school

Learning to work by part-time training in the city

Signed _____
(Person Completing Form)

Position _____

Date _____

APPENDIX J
INDUSTRIAL INTERVIEW QUESTIONNAIRE

Industrial Interview Questionnaire
Cincinnati Public Schools

Follow-Up Study

Questions Pertain To: _____
(First) (Last)

Employee's Job Title: _____ Date _____

Name of Firm: _____

Address _____

Nature of Business _____

Number Employed _____
Men Women Total

Person Interviewed: _____ Position: _____

Note: All questions pertain to the "designated employee" and indicated Job Title, and will be kept strictly confidential. Ratings of employee should be based on comparison with other company employees.

1. This employee's job could be classified as :

Skilled Semi-Skilled Unskilled Other (Specify)

2. Employee completed an application form, Yes _____ No _____
Had a personal interview, Yes _____ No _____

3. Were any screening tests administered to this employee? Yes _____
No _____ Type _____

4. Is previous experience required for this employee's job? Yes _____
No _____ Type and Amount _____
Any Special Licenses required? Yes _____ No _____ : Type _____

5. Is a High School Diploma necessary for employment with this firm?
Yes _____ No _____ For this specific job title? Yes _____
No _____ Comment _____

6. Preference for this specific job title is : _____
Male Female
_____ No Preference
7. The minimum age for employment at this firm is _____
8. Estimate an educational grade level (primarily Reading and Arithmetic based) that would suffice for employment within your firm.

6th 7th 8th 9th 10th 11th 12th Diploma Other (Specify)
9. Give a numerical estimate for the period of time that would be permitted a beginning employee, if making an unsuccessful adjustment.

No. of Days Weeks Months Other (Specify)
10. Has this employee learned to assume responsibility for taking directions and seeing the job through to completion with supervision? Yes _____
No _____ Who gives direct supervision to the employee _____
How is this done _____
Observation Demonstration Lecture Other (Specify)
11. Length of probationary period permitted a new employee before dismissal for inefficiency or slowness? _____
No. of Days No. Weeks No Months Other (Specify)
What production level or level of efficiency must be reached to keep this job _____

12. Has this employee developed the vocabulary skills required on several kinds of jobs? Yes _____ No _____ The accuracy for several kinds of jobs? Yes _____ No _____
13. Is this employee able to cope with complex methods in the scheduling of work?
Yes _____ No _____
14. Has any claim for Workman's Compensation Insurance been filed by this employee due to accident or such? Yes _____ No _____ Year or filing claim _____
15. Is this employee a member of an organized labor union? Yes _____ No _____
Which _____ Is membership required? Yes _____
No _____ Time permitted before joining union _____
Initial Fee \$ _____ Dues \$ _____ Per _____

16. Personality Requirements needed for this job title :

Emotional Stability _____
Very Stable Average

Manners _____
Outstanding Average

Appearance _____
Important Unimportant

Disposition _____
Important Unimportant

17. Regular Duties and Responsibilities of this worker on this job are :

17. Cont....

Supplementary Duties (performed occasionally, etc.)

18. Give your opinion of following this procedure in providing the "student-trainee" with a variety of actual employment experiences in community business firms:

	Important	Not Important
a) Locate a business firm which has the kind of operation and supervision necessary to provide adequate training jobs for the student	_____	_____
b) Convince the employer of the value of a job training program to both the business and the student. The employer should accept each student-trainee for a short period of training.	_____	_____
c) Evaluate the student-trainee's progress through personal observation by the Work Study Coordinator and the employer, and self-evaluation by the student. This would be provided for through the completion of weekly rating forms.	_____	_____
d) Establish the student-trainee in a total of four job training experiences of short duration.	_____	_____
e) Employer's final evaluation and writing of a letter of recommendation for the student-trainee, which greatly facilitates the securing of employment after completing school.	_____	_____

19. Skills needed for this job:

Skill	Much	Little	None	Comment
Driving Vehicle:	_____	_____	_____	_____
Telephoning:				
a) Local	_____	_____	_____	_____
b) Distance	_____	_____	_____	_____
Money:				
a) Purchases	_____	_____	_____	_____
b) Change	_____	_____	_____	_____
c) Register	_____	_____	_____	_____
d) Records	_____	_____	_____	_____
e) Time Clock	_____	_____	_____	_____
Human Relations:				
a) Customers	_____	_____	_____	_____
b) Employers	_____	_____	_____	_____
Tools:				
a) Hand Tool Knowledge	_____	_____	_____	Specify Which _____
b) Machine Tool Knowledge	_____	_____	_____	Specify Which _____

20. Working condition for this job title:

- a) Gross wage is \$ _____ per month
- b) Overtime: Yes _____ No _____
- c) Beginning Salary for this job: \$ _____ per _____
- d) Any wage increases? Yes _____ No _____ Frequency _____
How determined _____

e) Wage Supplements	Yes	No	Comment
Bonus	_____	_____	_____
Meals	_____	_____	_____
Room	_____	_____	_____
Uniforms	_____	_____	_____
Travel Expenses	_____	_____	_____
Other	_____	_____	_____

20. Cont. . . .

- f) Number of days worked per week _____
 Working hours per day _____ per week _____
 Hourly rate _____
 Approximate the number of hours worked per week over an extended
 period of time _____
 Rate for overtime _____
 Same Time and one-half Other
- Extra Wages for overtime _____
 Gross Weekly Overtime _____
 * Gross Total Weekly Wage _____
 * Estimate of Yearly Gross Wages' _____

21. How is a new person trained on this job ? _____

22. What advancement is possible from this job ?

Job	Duties	Education Required	Wage
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

23. Academic Skills Needed for this Job:
 A. This employee's job requires _____
 No reading skills Simple reading skills

Complex skills	Other
_____	_____

B. The most frequent types of required reading for this employee (use specific word examples)

1. Signs: _____
2. Labels: _____
3. Printed tags: _____
4. Inventory sheets: _____
5. Directions on machines, etc.: _____
6. Bulletin boards: _____
7. Memos and notes: _____
8. Others: _____

C. Writing skills required in performing this employee's job are:

Not Needed	Repetitious	Filling Forms	Tallying Marks on Forms
Simple in Nature	Complex	Other (Specify)	

1. Indicate the specific writing functions this employee performs:

- Signing Name (where) _____
- Completing Forms (which) _____
- Writing Reports (Specify) _____
- Filling-in Printed Forms (Specify) _____
- Tally Marks on Forms (Specify) _____

D. Mathematical functions required in this employee's position:

- _____ None
- _____ Counting Only
- _____ Addition Only
- _____ Subtraction
- _____ Addition and Subtraction
- _____ Multiplying
- _____ Dividing
- _____ Fractions
- _____ Using "Ruler" or "Tape Measure"
- _____ Decimals
- _____ Percentages
- _____ Money
- _____ Pay or Wages
- _____ Taxes

E. Knowledgeability of Geography required:

Local	County	State	National
Specify the responsibility that requires this _____			

24. Specify any other job titles in this job area requiring similar academics and skills:

Job Title	Skilled	Semi-Skilled	Unskilled	Comments
a) _____	_____	_____	_____	_____
b) _____	_____	_____	_____	_____

25. As an employer, would you be willing to sponsor a job training program for the occupational training of special education students? Yes _____
No _____ Would you be willing to consider these people for employment after completing the training program? Yes _____ No _____

Signed _____
(Person Completing Form)

Position _____

Date _____

APPENDIX K
OPINIONS OF EDUCATORS AND EMPLOYERS REGARDING THE TEACHING
OF JOB-RELATED CONTENT AREAS

From May 18 - 21 (incl.) the Cincinnati Public Schools presented a workshop for Vocation Education - Special Education. Consultants gave presentations, demonstrations, and openly expressed their views in small group discussions. A total of eighty educators were willing to complete a questionnaire following the workshop. Question sixteen of this questionnaire required this group of educators to express their opinions as to whether certain services to handicapped pupils, who would leave school before graduation would be "Important" or "Not Important". An analysis of those in attendance revealed the following group composition:

Area of Specialization	Number Contributing
Special Education	47
Vocational Education	8
Industrial Arts	8
Home Economics	8
Counselors	5
Business Education	2
School Psychology	1
Interested Persons	1
	<hr/>
Total	80

The tabulated results of the eighty educator's opinions were as follows:

<u>Services</u>	<u>Important</u>	<u>Not Important</u>	<u>No Response</u>	<u>Total</u>
Learning about jobs available throughout the nation	56	19	5	80
Learning what is required to get and keep jobs	78	0	2	80
Learning skills for various jobs (machines, etc.)	70	55	5	80
Measuring the aptitudes and abilities of each pupil to compare with these job requirements	69	6	5	80
Learning to work through having jobs in school	75	1	4	80
Learning to work by having part-time training in city	79	0	1	80

The eighty educators who responded were not aware that this exact question had been included in a follow-up questionnaire for hearing impaired, visually impaired, and orthopedically handicapped students; this question was also included on the industrial questionnaire mailed to subjects' employers, and a total of 26 employers gave the following opinions:

<u>Services</u>	<u>Important</u>	<u>Not Important</u>	<u>No Response</u>	<u>Total</u>
Learning about jobs available throughout the nation	17	9	0	26
Learning what is required to get and keep jobs	26	0	0	26
Learning skills for various jobs (machines, etc.)	21	5	0	26
Measuring the aptitudes and abilities of each pupil to compare with these job requirements	23	3	0	26
Learning to work through having jobs in school	24	2	0	26
Learning to work by having part-time training in city	21	5	0	26

APPENDIX L
REGULAR AND SUPPLEMENTARY DUTIES
PER JOB RESPONSIBILITY

Billing Clerk

1. Take delivery orders by phone and type them
2. Keep a book inventory of merchandise held in various customer accounts
3. Compute monthly storage and handling charges for all storage accounts
4. Prepare and type storage invoices
5. Complete book inventory reports for customers as requested
6. Accept C.O.D. payments for merchandise picked up at warehouse

Food Service Worker

Incumbent performs simple routine tasks in food service dishwashing, pot washing, and cleaning in the dietetic service area. Through on-the-job assignment, receives training in all duties. May work either the early or late shift, Saturday, Sunday and holidays as assigned. Entirely responsible for the soaking and washing of all pots and pans from the kitchen and bake shop. Fills the soak sinks with water and fills the mechanical pot and pan washer with water and keeps the soap dispenser properly filled. Cleans sink and pot machine when operation is completed. Keeps work area well mopped. Is responsible for returning all clean utensils, pots and pans to their proper location (pot and pan rack, utensil drawer, or bake shop).

Responsible for the removal of all trash from the kitchen and bake shop and takes it to the proper storage area in the basement.

Incumbent is responsible for the emptying of the drain bucket in all walk-in refrigerators and the mopping of the inside flooring.

Empties trash buckets, sweeps and mops supervisory cooks' office daily.

Is responsible for the washing of all small carts and trucks used by the dietetic service. These carts are brought to the washing area by higher grade employæes.

Supplementary Duties: Makes coffee and fills insulated servers and makes toast when needed. Does special cleaning and other duties as assigned by the supervisors.

Work Activity Center Client

This is a severely disabled adult with muscular dystrophy. He has been trained in the work activities center to perform 5 job tasks and works within that framework. He is paid on a piece rate basis for what he produces, as the law requires (Federal Wage & Hour); his abilities for his handicap would be considered above average when compared to the average mean served in this facility. The educational requirements for this facility can actually be 0, as at this date, approximately 40% of our clients have had no formal schooling, but function within the framework and goals of the center. The time element in training for a job cannot be evaluated, as each individual's handicap must be worked with, and his abilities to produce within his limits developed. The reader of this report should have a good working knowledge of the function, purpose, and goals of a multi-disability Work Activities Center, in order to obtain a valid study.

Pieceworker

1. Trims and sorts leather according to color and texture
2. Packages bolts and washers
3. Places sponges on metal pieces in exact location

Supplementary Duties: Assists other employees in activities of daily living.

Clerical Assistant

1. Primarily mail-messenger service
2. Xeroxing
3. Filing
4. Answering phone

Cashier

1. Reconciles cash sheet
2. Checks cash sheet against computer run-off to detect errors
3. Mails all bills each billing period, after checking for accuracy

Bindery Worker

1. Picks up braille pages in proper sequence, collates them, and binds them in proper order.

Food Handler

1. Processing food
2. Rolls pie shells
3. Cuts up chicken
4. "Jug" up merchandise (package)

Inspector (Receiving)

1. Inspection of raw materials
2. Laboratory testing of inks
3. Checking specifications to insure vendor reliability
4. Institute inspection programs

Supplementary Duties: Coordinate with purchasing screening of vendors; viscosity tests.

Bookbinder

1. Tears off old covers
2. Nips book in a smashing machine
3. Trims off old back and old sewing with a trimming machine

IBM Punch Operator

1. Operates IBM verifying machine
2. Files freight bills, etc.

Loose Heel Seat Nailer

1. Nailing on an automatic machine the part of the sole that extends to the heel of the shoe.

Supplementary Duties:

1. Observe workmanship of previous operators to see if his particular operation can be successfully performed.
2. Care in handling shoe
3. Light maintenance of his equipment

Key Punch Operator

1. Key punch or verify any of several jobs we do
2. She was a temporary Grade 4 - assistant supervisor for 5 months

Supplementary Duties: Assistant supervisor

Box Spring Supplier

Learn different types of springs, box springs, and types of frames and keeping line supplied

Commercial Photographer

1. Operates equipment costing approximately \$50,000

2. Operates camera
3. Operates slide duplicators
4. Mixes chemicals
5. Uses densitometer (complicated machine)

Supplementary Duties: Uses photo enlarger; Keeps records and prices , bills of work performed to customer

Assembler

Varies according to job; now packing soap; puts certain number of one color soap in another box; assembly or packing in nature

Clerk

1. Operates Xerox machine for entire laboratory
2. Keeps log of copies made by section
3. Responsible for maintenance of machine and supplies
4. Calls Xerox maintenance man when necessary
5. Helps with mailing publications

Supplementary Duties: Stamps envelopes; filing of reference cards

Extractorman-Tumblerman

1. Extract all linen and uniforms used at this hospital
2. Runs through drying tumblers, used to dry linen and clothing
3. Relieve on washing machines

Supplementary Duties: Helps sort linen into different classifications.

Wrapper Helper

1. Runs or operates a bagging machine by keeping machine running, and maintain proper speed of bagger.

2. Watch operation of bread so that bread is not fouled up
3. Tape machine and rethread machine
4. Racks bread
5. Inspector of his own bread line; no holes in bags and see that they are tied properly

Package Collector

1. Picking up packages from selling departments and taking them to delivery.
2. Moves unwrapped merchandise to correct wrap desk.

Mail Clerk

1. Sorts incoming mail for distribution
2. Operates Xerox Manafax Telecopies for ECA Cinti Lab, in sending documents to, or receiving documents from head quarters in Rochville.
3. Operates Model 2400 Xerox office copies
4. Performs related duties as assigned.

APPENDIX M

Job Titles	Beginning Salaries/Mo	Wage Supplements	Wage Increases		Frequency	How Determined	Overtime	
			Yes (X) No (XX)	Yes (X) No (XX)			Yes (X) No (XX)	Rate
Pkg. Collector	\$ 346.67	Medical	X			Merit		XX
Inside Ring Polisher	390.00	Pd. for superior work performance	X		Periodically		X	Time & 1/2
Mail Clerk	314.75		X		10¢ per 45 days up to 30 ¢		X	Time & 1/2
Wrapper Helper	520.00		X		every 6 mo.	Merit Increases		XX
Key Punch Opr.	320.00	Uniforms	X		Yearly	Wage survey of local area		XX
Extractor-tumblerman	393.60	Xmas Bonus	X		6 mo. then reviewed yrly.	Merit	X	Time & 1/2
Clerk-Typist	285.00		X			Paid on piece-work		XX
Assembler	126.00	Bonus, coffee, uniforms travel exp.	X				X	Time & 1/2
Com Photographer	264.00			XX				
Clerk	333.35		X		6 months	Salary Schedule	X	Time & 1/2
Box Spring Supplier	374.40		X			In grade step		XX
Teacher's Aide	240.00	Bonus; when suprv. recommends	X					XX
Key Punch Opr.	353.00	Xmas Bonus	X			Pd. on piecework		XX
Teacher	280.00		X					XX
Loose Heel Seat	280.00		X					XX
Nailer	264.00	Bonus	X			Employee perform. Rates reviewed & adj. by owner	X	Time & 1/2
IBM Punch Operator	280.00		X			Merit		XX
Bookbinder	280.00	Over:time; travel exp.	X		Yearly	Pers. evaluation	X	Time & 1/2
Inspector (Receiving)	340.00	Meals; uniforms	X			Auto if satisfactory		XX
Food Handler	256.00	Noon meal	X			Bidding on contract		XX
Bindery Worker	Varies		X				X	Time & 1/2
Clerical Assistant	343.75	Bonus	X					XX
Free Lance Artist	Varies		X					XX
Pieceworker	50.00		X					XX
Key Punch Opr.	316.00	Bonus	X		Twice 1st yr. then annually		X	Time & 1/2
Work Act. Ctr. Client	42.00		X					XX
Food Serv. Worker	393.60	Uniforms	X		Yearly	Wage Board Survey		XX
Musician	80.00		X					XX
Billing Clerk	300.00		X		3 months	Merit	X	Time & 1/2
Cashier	368.00		X		6 months	Merit	X	Time & 1/2

BIBLIOGRAPHY

- Beckmeyer, Theodore. "Application of Programmed Instruction to Remedial Reading for the Deaf." Volta Review, LXV (October, 1963), 415-17.
- Blish, Stanford C. "Auditory Impairment-Educational and Vocational Guidance of the Deaf." In Selected Convention Paper, Inspection and Introduction of Special Education. 42nd Annual CEC Convention, Chicago, Illinois (March 31 - April 4, 1964). Washington, D.C.: The Council for Exceptional Children, NIA.
- Bornstein, Harry. "A Preliminary Report on the Evaluation of High School Mathematics Programmed Texts When Used with Deaf Students." Report of the Proceedings of the International Congress on Education of the Deaf and of the Forty-First Meeting of the Convention of American Instructors of the Deaf. Washington, D.C.: Government Printing Office, 1964, 893-900.
- Brieland, Donald. "A Followup Study of Orthopedically Handicapped High School Graduates." Exceptional Children, XXXIII (April, 1967),
- Buell, J. "Employment Status of Former Pupils of the California School for the Blind." Exceptional Children, XXIII (1957), 364-8.
- Carlson, Anne H. "Vocational and Social Adjustment of Physically Handicapped Students." Exceptional Children, XXIII (1957), 364-8.
- "The Cincinnati Program for the Visually Handicapped," Cincinnati Public Schools, Dept. of Administration and Personnel, Div. of Special Education, Cincinnati, Ohio, May, 1967. (Mimeographed.)
- "The Cincinnati Public School Program for Deaf, Hard of Hearing, and Language Handicapped Children," Cincinnati Public Schools, Dept. of Student Development, Div. of Special Education, Cincinnati, 1969, (mimeographed.)
- Dinger, Jack C. "Post School Adjustment of Former Special Education Pupils with Implications for Curricular Revision." Unpublished doctoral dissertation, The Pennsylvania State University, 1958.
- Dauwalder, Donald D. Education, Training, and Employment of the Blind. Pittsburgh, Pa.: The Western Pennsylvania School for Blind Children, June, 1964.

- Garrett, Charles W. "Quo Vadis: A Pilot Study of Employment Opportunities for the Hearing Impaired." Volta Review, LXVI (November, 1964), 669-77.
- Grego, F.M. "The Illinois Children's Hospital-School - A Follow-up Study." Unpublished masters thesis, Illinois State University, 1965.
- Hammermeister, F.K. "The Stability of Reading Achievement in Deaf Adults." Unpublished doctoral dissertation, University of Pittsburgh, 1967.
- Knowles, Lyle. "Successful and Unsuccessful Rehabilitation of the Legally Blind." New Outlook for the Blind, LXV (1969), 129-36.
- Lunde, Anders; and Bigman, Stanley K. Occupational Conditions Among the Deaf: A Report on a National Survey. Washington, D.C.: Gallaudet College and the National Association of the Deaf, September, 1959.
- Niesen, Norman J. "A Study of Certain Characteristics of Educable Mentally Retarded Pupils Who Graduated and Those Who Did Not Graduate from the Cincinnati Public Schools' Special Education Program." Unpublished Doctor of Education Research Study No. 1, Colorado State College, 1965.
- "An Outline of the Organization and Program of Condon School," Cincinnati, Ohio. (Mimeographed.)
- Peterson, LeRoy, and Smith, Lloyd L. "A Comparison of the Post-School Adjustment of Educable Mentally Retarded Adults with that of Normal Intelligence." Exceptional Children XXVI (1959-60), 404-8.
- Prince, R.J. "The Communication of Deaf Adults in a Work Setting." Unpublished doctoral dissertation. University of Pittsburgh, 1967.
- Quigley, Stephen P. "Research on the Vocational Rehabilitation of Deaf People." Report of the Proceedings of the International Congress on Education of the Deaf and the Forty-First Meeting of the Convention of American Instructors of the Deaf. Washington, D.C.; Government Printing Office, 1964, 1088-95.
- Rodda, M. "Social Adjustment of Hearing-impaired Adolescents." Volta Review, LVIII (April, 1966), 279-83
- Rosen, Albert. "Deaf College Students' Preferences Regarding the Hearing Status of Counselors." Journal of Rehabilitation of the Deaf, I (January, 1968), 20-7.
- Scho 1, Geraldine; Bauman, Mary K.; and Crissey, Marie Skodak. A Study of the Vocational Success of Groups of the Visually Handicapped. The University of Michigan, School of Education, Ann Arbor, Michigan, November, 1969.

Special Staff Organized by the Midwest Administration Center. Supplementary Papers Cincinnati School Survey. Cincinnati, Ohio: Commissioned by Cincinnatians United for Good Schools, August, 1968.

Teachers Handbook. Division of Research, Statistics, and Information, third edition. Cincinnati, Ohio: Cincinnati Public Schools, September, 1963.

Vaughn, Gwenth. "Hearing-impaired Students Benefit from Supportive Programs." Volta Review, LXX (January, 1968), 14-23, and 58.

Williams, Boyce. "Basic Needs of Deaf People." In W.N. Craig (Ed.) Rehabilitation for the Deaf: Threshold of Innovation. Pittsburgh, Pa.: University of Pittsburgh, 1967.