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VOCATIONAL EDUCATION FOR PERSONS WITH SPECIAL NEEDS.
CALIFORNIA STATE DEPT. OF EDUCATION, SACRAMENTO

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A SURVEY OF RESEARCH WAS MADE TO IDENTIFY THE VOCATIONAL NEEDS OF INDIVIDUALS WITH SPECIAL PROBLEMS. COMPLETED STUDIES, RESEARCH-IN-PROGRESS, AND CURRENT PROPOSALS WERE INCLUDED. TOPICS COVERED IN THIS SUMMARY ARE (1) AGING, (2) CONTINUATION EDUCATION, (3) THE CULTURALLY DEPRIVED, (4) DELINQUENCY, (5) DROPOUT, (6) EMOTIONAL DISTURBANCE, (7) LOW ABILITY, (8) MENTAL RETARDATION, (9) MINORITY RACIAL GROUPS, (10) PHYSICALLY HANDICAPPED STUDENTS, (11) SMALL SCHOOLS, (12) SOCIOECONOMIC STUDIES, (13) UNDERACHIEVERS, AND (14) WORK OPPORTUNITIES. A BIBLIOGRAPHY IS INCLUDED. (MS)

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RESEARCH SUMMARIES

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Vocational Education for Persons with Special Needs

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P R E F A C E

As technological advancements have placed demands on business and industry for workers with changing and increasing occupational skills and highly technical competencies, an added burden has been placed on those individuals with special problems - physical or mental abnormalities, racial origin, aging, socioeconomic and cultural disadvantages, and inadequate schooling - and upon those responsible for their training. Because of the importance of identifying and studying the needs of these groups to whom occupational opportunities have been limited and of developing training programs by which their needs can be met, the Research Coordinating Unit, Vocational Education Section, State Department of Education, has made a survey of studies completed in this area. Also included in this review are reports of related studies currently underway, project proposals that have been funded by the United States Office of Education under Section 4(c) of P. L. 88-210, reports found in current journals, and dissertation abstracts. Completion dates for 4(c) projects have been provided to enable persons who are interested in specific projects to determine the approximate date of their availability. Although it is felt that this review is representative of recent research concerning the vocational needs of special groups, it is not intended to be considered as a comprehensive coverage.

The areas of concern of this report have been presented alphabetically and not on the basis of relative importance. Projects or studies marked with an asterisk (*) have been conducted in California or are currently being conducted in California.

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VOCATIONAL EDUCATION FOR PERSONS WITH SPECIAL NEEDS

A G I N G

Problems surrounding aging have been compounded in recent years by declining retirement age, forced retirement policies, and employer attitudes, while medical advancements have increased the expected life span. These facts, coupled with changing technology, suggest a need for increased interest in the problems of aging.

Two studies concerning the social psychology of aging in industry were conducted by Meltzer (1965). He points out several factors that would lead to improved mental health of all workers: social acceptance of facts about senior citizens, the replacement of stereotypes of the elderly, a need for planned change of activity, and gradual withdrawal of the everyday job routine in line with realities in a given situation. A change in the attitudes of employers is considered more important than a change in employee attitudes. The programs Meltzer suggests to fulfill the needs discussed in the study are:

- 1) counseling people over 40 years of age while they are still on the job
- 2) discontinuance of the practice of not hiring people over 40
- 3) a planned program for acceptance of change
- 4) organizing labor-management mental-health programs that provide relevant and adoptive services, particularly for people who are not reared by middle-class values

Disabled

When an aging person is disabled, his problems are compounded. A 50-month project involving 835 persons and the cooperative efforts of several agencies, was conducted by Rusalem (1963a) in New York City. Individualized vocational rehabilitation was provided for each disabled

persons 55 years of age or older, and one or more of the following services was offered: case-finding, intake, vocational counseling, vocational diagnosis, workshop diagnosis, psychological testing, personal adjustment and vocational training, placement in competitive industry, placement in a special sheltered workshop, follow-up and research. About 87 percent of all clients who entered the project completed their program, and 75 percent were provided with suitable employment. In a follow-up of 101 clients who were placed on jobs, nearly 50 percent reported the major project contribution had been in elevating their self-confidence, morale, and status.

Rusalem (1963b) also conducted an experimental study involving 118 aged disabled clients. The experimental group had a mean age of 72.7 years with no client under 70 years of age, and the control group had a mean age of 63.4 and no client over 69 years of age. The people in the group over 70 were found to be less limited by their physical and intellectual limitations, were more realistic in their vocational plans, and were rated more favorably on employability variables by project counselors. In follow-up they were found to have achieved as much employment success as the younger group had achieved. Hence it was concluded that those older persons who persist in the labor market, despite advanced age and retirement pressures, are a select and relatively competent group.

C O N T I N U A T I O N E D U C A T I O N

Hickman (1964)* conducted a study with dropouts who returned to school for a summer program to determine if it were possible for the dropout to gain better self-insight in addition to raising

achievement in math, English, and reading. Findings of the program were as follows:

- 1) dropouts valued an education
- 2) there was a measured intellectual gain, with the mean I.Q. increasing from 92 to 99
- 3) there were phenomenal gains made in occupational awareness as demonstrated by choice-making
- 4) a noticeable growth in self-confidence took place
- 5) the program's success in part was attributed to the ability of the counselors and teachers to work together as a team

THE CULTURALLY DEPRIVED

Aspirations

A federally funded project to examine the relationship between academic and vocational aspirations of culturally deprived students is being conducted by Dales and Walters. The beginning date was June 1, 1965, and the expected completion date is May 31, 1969. Both white and Negro students from low economic areas will be studied pertaining to aspirations, school continuation, self-concepts, and school, family, and friendship patterns.

Basic Skills

A project to develop an effective method of imparting necessary literacy skills to adults was conducted by Heding (1966). An experimental project involving a learning laboratory for imparting basic skills prior to vocational school entrance is being conducted by Borota in an effort to compare performance of vocational school students who have had the advantage of a learning laboratory with those

who have not. The project had a beginning date of May 1, 1965 and an ending date of June 30, 1968.

A Comparative Study

A project has been funded through the Vocational Education Act of 1963 to compare techniques in the United States with those used in Great Britain as solutions to the educational-vocational problems of disadvantaged youth. The project began December 1, 1965, and is scheduled for a completion date of August 31, 1966. It is being conducted by Robert Gibson.

Teacher Preparation

The establishment of two centers for the development of a new program to prepare teachers of the culturally disadvantaged is underway by the California State Department of Education, The University of California at Berkeley, Fresno State College, and the California State College at Hayward. This project is under the direction of Paul Lawrence (1966)*. The completion date is scheduled for February 1969. The project has been named "Operation Fair Chance". Centers are located at California State College at Hayward and Fresno State College.

Identification

In an attempt to identify culturally deprived children, Larson and Olsen (1963) used tests to provide information pertaining to language development, self-concept, social skills, and cultural differences. The four areas provide a theoretical structure for differentiating the culturally deprived at the kindergarten level.

DELINQUENCY

A definite void appears in the literature relative to work of a vocational nature for boys showing delinquent behavior. A study was conducted in the Boston area by Massimo and Shore (1963) with 20 adolescent boys who had records of antisocial activities. An experimental group was given vocationally oriented psychotherapy, with the result that a significant improvement was shown by this group over the control group.

Mandell and Sullivan are exploring the degree to which vocational education and guidance during incarceration, combined with supportive and placement services following release, may serve to restore youthful offenders to the community as functioning, useful citizens. This project began June 1, 1965, and was scheduled for completion May 31, 1966.

DROPOUTS

The dropout who lacks the education considered to be an effective weapon against unemployment and inadequate training has been labeled a source of problems in our society. Much work is being done to identify potential dropouts and to provide programs of education that will reduce this waste of human resource.

Evaluation

An evaluation of a work-study program was made by Fram (1966), who found that the following objectives of work-study programs had been achieved:

- 1) to enable the student to relate working situations to his

academic instruction

- 2) to enable the student to obtain earnings to help finance his education
- 3) to afford cooperating companies the opportunity to evaluate the student for full-time employment after graduation
- 4) to enable the student to refine and evaluate his occupational goals

The following objectives were found not to have been achieved by the work-study program:

- 1) to enable the student to observe business and/or industrial techniques and principles in operation
- 2) to improve the status of the academic program in the eyes of employers
- 3) to enable the students to understand through practical experience how to get along with others in a working situation

It was not possible to evaluate the following objectives of the work-study program:

- 1) to help the student mature
- 2) to motivate the student toward academic work
- 3) to enable the student to make professional contacts with potential employers

An evaluation of curricular offerings as causative factors for students dropping out of high school prior to graduation was made by Handy (1965). Through the use of a descriptive survey questionnaire, he found that curricular offerings had an effect upon the school's holding power of the student. Traditional academic subjects did not appeal to the majority of the dropouts who were involved in the study. A majority of the dropouts reported that their counselors were not helpful. A majority of the dropouts reported that school subjects they had taken had not adequately prepared them for the world of work.

Two major reasons were given by male dropouts for dropping out of school. One was a lack of interest in school, and the other was unsatisfactory curricular offerings. Female dropouts gave marriage and pregnancy as the major reasons for dropping out of school. Most of the dropouts who participated in this study reported that they were bored with school but indicated that they would return to school if they could choose the courses they wanted to take. Most of the parents of dropouts wanted their youngsters to continue their education.

Identification

A graduate study to develop and test a model for identification of high school dropouts was completed by Stevens (1965). Findings include the following:

- 1) more dropouts than graduates were retarded in grade
- 2) the mean average for graduates was significantly higher than for dropouts in grade average, mental ability, achievement level, and reading level
- 3) graduates were significantly higher than dropouts in school attendance, occupational level of principal wage-earner in family, educational level of family members, and peer group friends
- 4) a significantly higher percentage of graduates than of dropouts participated in extra-curricular activities
- 5) graduates tended to have peer group friends
- 6) home and employment experiences were not significant in decision to drop out of school
- 7) the author concluded that at his school the potential dropout can be distinguished from the graduate

Differences in mental health characteristics between dropouts and non-dropouts were studied by Walton (1965) to determine if potential

dropouts could be identified. Findings were given for white, Mexican-American, and Negro pupils. The following table has been provided to show the results:

TABLE I

MENTAL HEALTH MEASURES ON WHICH SIGNIFICANTLY DIFFERENT RESULTS WERE OBTAINED BETWEEN DROPOUTS AND NON-DROPOUTS ACCORDING TO SEX AND ETHNIC BACKGROUND

MENTAL HEALTH MEASURE	RACIAL GROUP AND SEX					
	White		Mexican-American		Negro	
	Male	Female	Male	Female	Male	Female
1. Close personal relationships	x	x			x	x
2. Satisfying work and recreation	x	x				x
3. Adequate outlook and goals	x					
4. Behavioral immaturity	x					
5. Emotional instability	x	x	x			
6. Feelings of inadequacy	x	x				
7. Concern for physical defects	x					
8. Nervous manifestations	x	x	x	x		x
9. Total assets	x	x				x
10. Total liabilities	x	x				
11. Total characteristics	x	x			x	x
12. Inter-personal skills		x				
13. Social participation		x				

Thirteen mental health measures were used, and it may be noted in Table I that white male potential dropouts differed from non-dropouts in 11 of the 13 measures, and females differed in 10 of the 13 measures.

The table also shows that significant differences between dropout and non-dropout mental health measure scores occurred far less frequently for Mexican-American and Negro pupils. These results indicate that additional reasons for dropping out of school exist among the Negro and Mexican-American students that are not found among white students.

Speer (1965) conducted a causal-comparative study of dropouts and non-dropouts of vocational high school students and concluded that there is a common attitudinal factor which can be measured to differentiate significantly the potential dropout from the non-dropout.

A comparative analysis of the achievement and training success of high school dropouts who had reentered a training program was made by Roberts (1965). He found that:

- 1) participants who came from stable homes were more likely to complete training than participants from unstable homes
- 2) female participants were more likely to complete training than males
- 3) participants 20 years of age and over were more likely to complete training than younger participants
- 4) the program had greater holding power for white participants than for non-white participants
- 5) cultural background was not a significant influence as a holding power
- 6) family mobility was not found to be significant
- 7) cultural background was not found to significantly influence training success of participants
- 8) no significant differences were found in terms of academic achievement
- 9) no significant differences were found in vocational achievement between subgroups of cultural background, mobility, and age

A study was conducted by Reigel (1961) to determine the character-

istics of students who withdrew from school prior to graduation but returned for evening course work. He found that courses most often selected were of value for job entry or advancement on the job. The subjects judged as most valuable by the students who returned for evening school were typing, business, English, shorthand, bookkeeping, and business math. Those who had left school early indicated that they had not made use of the school's occupational guidance facilities while in school. Unemployment was listed as a serious problem with the group. The reasons given for not being able to find a job were not having the necessary job qualifications and not having a high school diploma.

"Preparation of the Disadvantaged for Vocational Training" is the title of a project started by Jeffery on September 1, 1965. This is an experimental project and is intended to prepare high school dropouts for vocational training through a basic education curriculum with special efforts to re-orient their social attitudes. Participants with delinquency records will be used. The program will be evaluated on the basis of social and academic progress of participants. The project completion date is August 31, 1967.

Predictive Studies

A study was conducted by Young (1964) entitled "Community Predictors of School Holding Powers". The purpose of the study was to determine the extent to which community variables can be used as predictors of high school holding power. The study included the formulation of a prediction equation. Significant positive correlations with "holding power" were found for six variables. The variables were as follows:

Median monthly rents in the community, mean income, median school grade reached by adults, the percentage of professionals in the population, and the median teacher salary. A negative correlation with "holding power" was obtained with the variable, percentage of overcrowded dwelling units. The investigator suggests that school programs should raise the socioeconomic aspirations of both adults and students if school holding power is to be increased.

Work-study programs for potential dropouts have been developed on the assumption that work improves adolescent motivation and adjustment. Freedman (1963) stated that recently completed research on urban early school leavers raises serious questions concerning these assumptions. The assumptions underlying work-study for potential dropouts and the need to refine criteria for judging the effectiveness of such programs are discussed in this research.

Prevention

An experimental study involving 75 potential dropouts was conducted by Longstreth (1964). The experimental program consisted of:

- 1) a small stable pupil-teacher ratio
- 2) a vocational curriculum
- 3) a counselor immediately available
- 4) afternoon jobs for pay and school credit

Evaluation was based on:

- 1) dropout rates
- 2) police contact rates
- 3) attitudes assessed by using before and after interviews with counselors

The control group consisted of an equal number of potential dropouts enrolled in the regular school program.

The program was successful in altering school dropout behavior. The aggressive subjects improved more than did passive subjects in attitude toward school. The data obtained indicated that the work-study program had a beneficial affect on school attitudes. In terms of the main evaluative criteria, dropout rates, the program was not successful. In addition, it did not reduce police contacts.

Taber (1963) provides information concerning a program carried out in Philadelphia for reducing school dropouts. He lists some of the methods used in this program as:

- 1) school-work program
- 2) the occupational practice shop
- 3) an approach to the improvement of education of children of limited background
- 4) a reading clinic

Summaries of Proposed Projects

"Analysis of Dropout Statistics in Selected Colorado School Districts" was the title of a project that was completed under the direction of Burrows. The project dates were from May 1, 1965, to August 1, 1965. The analysis was oriented toward two primary objectives:

- 1) to provide specific descriptive and comparative data for use in identifying potential dropouts
- 2) to establish a basis for the evaluation of action programs

The principal investigator of a demonstration training program for potential school dropouts was Sorenson. The project dates were from June 1, 1965 to May 31, 1966. The objectives were:

- 1) to provide a pre-vocational work laboratory in order to evaluate students' work habits, attitudes, vocational adjustments, appearance, and performance
- 2) to provide motivation for staying in school for the dropout prone student
- 3) to encourage employers to hire students who have had training

An experimental program to compare the relative values of training and education for young school dropouts is a project under investigation by Kaufman. The project had a beginning date of July 9, 1965 and is scheduled to terminate on February 28, 1970. The objectives are:

- 1) to investigate whether it is better economically and psychologically to provide high school dropouts with the opportunity to earn a high school diploma, or
- 2) to provide them with extended training for entry into a specific occupation

Characteristics of vocationally oriented school dropouts and graduates are being investigated by George Mallinson. The beginning date of the project was October 1, 1965, and the date on which it will terminate is June 30, 1967. The objectives are to study the characteristics of high school dropouts and graduates who:

- 1) enter technical training programs and who drop out
- 2) find employment immediately after completing high school
- 3) remain unemployed

Data concerning these students will be compared with information concerning students from the same high schools who entered institutions of higher education.

Identification of potential dropouts has been studied by Ralph O. Gallington, beginning June 1965 and ending December 1965. The major purpose of this study was to identify potential high school dropouts and

to examine the fate of some teenagers who have already left school.

The principal investigator of a pilot project to develop a program of occupational training for alienated school youth is Harry A. Becker. The beginning date of the project is May 1, 1965, ending August 31, 1967. The objectives are:

- 1) to identify and enroll school-alienated youth for an occupational training program that will prepare them for entry into the labor market
- 2) to effect behavioral changes through guidance, counseling, occupational training, and instruction in basic education, which will enable the youth to acquire personal characteristics needed for their role as productive adults and responsible citizens

High ability secondary dropouts are being investigated by Joseph H. French, beginning April 1965 and ending June 1966. In order to identify fields in which high school vocational programs should be developed, the initiator of this project will investigate the employment status, interest, and characteristics of recent secondary school dropouts with high ability.

E M O T I O N A L D I S T U R B A N C E

Quay, Morse, and Cutler (1966) conducted a study in which 441 public school children who were judged to be emotionally disturbed were rated by their teachers on a check list of problem behaviors. Three types of behavior which accounted for 76 percent of the variance were:

- 1) conduct problem or unsocialized aggression
- 2) inadequacy-immaturity
- 3) personality problems or neuroticism

The results suggest that differential programs for emotionally disturbed children will be necessary, depending upon their primary behavioral characteristics.

Gladis and Minton (1962) administered a job incentive form to hospitalized veterans, 138 of whom were considered to be emotionally disturbed and 128 who were hospitalized for reasons other than emotional disturbances. In ranking incentives in order of preference, both groups showed definite preferences for such incentives as job security, interesting work, and good working conditions, but showed little interest in job incentives concerned with authority, prestige, or the assumption of responsibility. There was a high degree of correspondence between the preferences of the two groups, with a rank order correlation of .95.

In a four-year project involving emotionally handicapped children in the elementary school, Jackson (1962) divided emotionally handicapped students into four groups. One group of children was placed in an adjustment class, and their parents attended weekly counseling sessions. A second experimental group remained in regular classes while mothers were given group counseling. The other two groups were control groups and remained in a regular school program. An advisory committee was established to make judgments about the program and improvement that resulted. In the judgment of the advisory committee, the case studies showed that programs for emotionally handicapped children could be successful in a public school. The adjustment group made significant improvement during the four-year program. Both experimental groups showed greater gain in achievement over the control groups. However, test findings for achievement were significant only for the adjustment

group. Both experimental groups showed significantly fewer problems on the teacher rating instrument at the end of the experimental period, and teachers observed significant positive behavioral changes in the children of the experimental groups.

A study by Gladfetter, Martin, Leon, and May (1963) evaluated the results of the Cornell Index on a population of 50 white married males who were dependent on community resources for economic support. The results of the Cornell Index and an interview indicated that well over one-half of these men had emotional disturbances which added to their incapacity to work and which operated against their vocational and psychiatric rehabilitation by present modes.

A review of 145 studies has been conducted by Morse and Dyer (1963). They covered the following topics:

- 1) incidence
- 2) identification of dynamic factors in maladjustment
- 3) training of teachers
- 4) role of school
- 5) special class and related educational provisions
- 6) dynamic factors in therapeutic education
- 7) school consultation and liaison
- 8) therapies affecting learning

L O W - A B I L I T Y

A study of selected factors bearing on the persistence and academic performance of low-ability students in four California junior colleges was made by Berg (1965)*. In general, it was found that students made

educational and vocational choices with much less regard for their personal needs, interests, and abilities than for the pressures from and standards of the college peer group. Academic performance and persistence was related in a positive way to the students level of aspiration. These low-ability students reported that they were very dissatisfied with the counseling program of the colleges attended but were satisfied with instruction and very satisfied with the junior college as an educational institution. Even though students reported dissatisfaction with the counseling program, they recognized that such services were of great importance to their success in college.

In his study of American schools, Conant found inadequate counseling services resulted from an insufficient number of counselors.

Lodato and Sokoloff (1963) conducted a project to determine the effectiveness of group counseling for slow learners. Ten students were involved in the study and were given group counseling sessions three times per week. These sessions included group discussions, role playing, pantomimes, athletics, field trips, parties, dancing, and record playing. During the second half of the project, the counseling sessions were increased to five times per week. Three of the students of the original ten moved from the community prior to the completion of the project. One student became sufficiently adjusted during the first half of the program that she was returned to regular class sections. Of the six remaining students, it was a consensus of the counseling staff, classroom teachers, and administration that four had shown marked improvement in behavior, in their attitudes towards school work, and in their relationships with school personnel. One had shown no change while one appeared to be regressing.

A project under the direction of Elliot D. Beckon, entitled "Revised Instructional Programs for Slow Learners to Improve Their Job Placement Opportunities" has recently been completed. Project duration was from April 30, 1965, to March 31, 1966. The objectives of the project were:

- 1) to identify and analyze the gainful employment potential of slow learners in the Medford Oregon High School, and of youth in the district who have dropped out of school
- 2) to survey the industrial and business community for job possibilities and related training needs
- 3) to revise the high school curriculum to meet adequately the needs of slow learners and dropouts
- 4) to place students in jobs and evaluate their performance on the job

A project in progress entitled "The Development of Specialized Educational Programs for Poor Learners for Use in Non-Educational Settings" is under the direction of Robert A. Walker. The beginning date was January 1, 1966, and the anticipated completion date is June 30, 1967. The objective of this program is to develop multi-media instructional units in four selected occupations which can be used to provide training in non-educational settings. The units are to be made available to persons with special learning problems in order to assist them in becoming gainfully employed.

In a study of the effects on personal adjustment of combined counseling and vocational training, the Manson Evaluation Test was administered by Gavales (1966) to 85 students between 17 and 21 years of age both before and after the counseling and training. These students were characterized by previous failures in social, academic and vocational endeavors. The Manson Evaluation Test was designed originally to detect alcoholism. However, total scores can be used as

an estimate of overall personal adjustment. All students and classes received regular individual and group counseling by skilled counselors. Subjects were enrolled in the following vocational classes: clerk-typist, offset printing, cleaning and pressing, and meat cutting. Each student received one or more individual counseling sessions per month. The pre and post-test scores were found to show significant increase in measured personality adjustment. Out of 85 subjects, 61 showed improvement, 19 showed a negative change and 5 showed no change at all. The degree of change in the negative scores was considerably smaller than the magnitude of the change in the positive scores.

Three major factors seem to underlie the positive personality changes which were observed during this study. The following are in order of estimated importance:

- 1) intensive, individualized, and grouped counseling
- 2) acquisition of significant skills through vocational training
- 3) receiving financial assistance while in training

M E N T A L R E T A R D A T I O N

A pilot program to test the feasibility of modifying a standard groundsman-gardener program to accommodate students with an I.Q. of less than 80 is being conducted under the direction of Roy Nicolaysen. A report of this project should be available in the fall of 1966*.

Rotary pursuit performances of normal and mentally retarded boys were compared as a function of supplementary knowledge of results and practice by Boumeister (1966). The findings of the project were:

- 1) the normals were initially superior, but with practice, the retardates overtook them

- 2) supplementary knowledge of results benefited both groups about equally
- 3) comparable amounts of reminiscence were shown by normals and retardates
- 4) the defectives displayed more warm-up decrement

Job Placement

In a study to determine the receptivity of employers to the hiring of mentally retarded and ex-mental patients, Hartlage (1966) contacted employers using four different approaches. The approaches were:

- 1) disability-centered interview
- 2) problem-centered interview
- 3) disability-centered mailed questionnaire
- 4) problem-centered mailed questionnaire

There were no significant differences in receptivity among approaches but differences did appear among industries of different types and of different sizes. Receptivity to the employment of disabled persons increased with the size of the employer's work force. Education of the employer was not related to receptivity. Employment counselors were more receptive than were personnel managers, and were more receptive to the problem-centered approach.

Smith (1964) conducted a study to determine whether or not employment counselors in the Colorado State Employment Service had favorable attitudes toward the mentally retarded and what knowledge they had of this condition. It was concluded that all of the counselors had favorable attitudes toward the mentally retarded, but the majority of the counselors in the state were apparently not well informed about mental retardation.

Special Programs for Mentally Retarded Students

Warren (1962) conducted a study to determine the effectiveness of special classes for the educable mentally retarded as measured by changes that occur in achievement test scores. The results indicated that control subjects tended to show more improvement in intelligence than the experimental subjects but not to a significant degree. It was found that early placement of educable mentally retarded students in special programs brought about more success than placement at a later date after the child had begun to recognize his tendency to be a failure.

M I N O R I T Y R A C I A L G R O U P S

Mexican-American

A study of learning ability in Mexican-American and Anglo-American children was made by Jensen (1961). Fourth and sixth grade Mexican-American and Anglo-American children with I.Q. levels ranging from 60 to 120 were compared on a number of different learning tasks. The main finding was that on direct measures of learning ability, little differences in the groups are noted. The author found the majority of Mexican-Americans with low I.Q.'s quite normal in learning ability. It was concluded that since this group are not basically slow learners, they should not be placed, as they are now, in classes with Anglo-Americans of low I.Q. who are basically slow learners and therefore require different methods of teaching.

In a study of the dropout problem of Mexican-Americans in urban public schools, Sheldon (1961) found that Mexican-Americans were more likely to drop out than are students of other ethnic groups, and that differences between male and female dropout rates are not significant.

Sheldon found that students who dropped out tended to have unsatisfactory ratings by teachers on scales of behavior, and tended to come from families in which the parent had an occupation of low status. There was a greater turnover in schools where the population of the student body was dominantly Mexican-American. Mexican-Americans are more likely to remain in school in areas where other groups represent a majority.

A study in progress under the direction of Constance Amsden is entitled "Teaching Mexican-American Children to Read". This study began on September 1, 1965, and will end August 31, 1966. This project is an experiment to improve the reading ability of Mexican-American children of low socioeconomic status who have learning difficulties because of their bi-cultural and bilingual backgrounds.

Clayton L. Stouffer conducted a project intended to develop educational television programs in the San Francisco Bay Area to teach English to the Spanish-speaking people. The project was financed under Section 4(c) of P.L. 88-210, Vocational Education Act of 1963. The project was to include identification and encouragement of those who could profit from instruction and the development of workbooks and study guides to assist those who would take the television course. The project was completed September 30, 1965*, but did not include the actual production or transmission of a television course. Ideas were formulated which may be of value to others desiring to do work in this area.

Negro

A study was conducted by Chansky (1965) to determine relationships which might exist between vocational interests, aptitudes, and race. Negro and Caucasian ninth graders were matched on scores obtained from

the Multiple Aptitude Test. Significant differences were found in vocational interests between the Negro and Caucasian groups. The Negro student was interested in interpersonal, business, verbal, computational, and long-term training occupations, while the Caucasian was interested in occupations concerned with nature and machines. Low correlations between aptitude and interest tests were obtained, reaffirming the belief that vocational inclinations of ninth graders cannot, to any great extent, be explained on the basis of verbal-spatial or spatial proclivities. The author states, this study's findings seem to issue a warning as to the advisability of depending too heavily on aptitude and interest data in grading ninth graders. A particular caution is urged in using aptitude and interest data in placing students in tracks.

Several federally funded projects pertaining to the Negro have been carried out. One such project is an analysis and interpretation of data on the social characteristics of residents of Vine City, an urban Negro slum. It is being conducted by Marcia L. Halvorsen, beginning February 6, 1966, and ending August 31, 1966. The project involved analyzing data already collected concerning the characteristics of urban Negro slum residents of Vine City. The following areas were included in questioning;

- | | |
|---------------------------------|--|
| 1) family structure | 7) income and employment |
| 2) marital patterns | 8) political behavior and attitudes toward authority |
| 3) housing | 9) leisure activities |
| 4) education | 10) deviant behavior and attitudes |
| 5) health | 11) class identification and awareness |
| 6) budget and spending patterns | |

Aims of the analysis are:

- 1) to determine objectively what patterns of these special characteristics are found in this particular segment of our nation's poor
- 2) to determine what differences and similarities exist between these patterns and those assumed in the literature to be characteristic of the poor in general

Another project underway is "Family Influence on the Achievement and Attitudes of Urban Negro Americans". The principal investigator is Edgar G. Epps, and the beginning date of the project was September 1, 1965, and the anticipated ending date is August 31, 1967. The objectives are as follows:

- 1) to study the achievements, motives, values, and behavior of Negro high school students in the North and in the South
- 2) to examine the social and economic status, family social structure, and community pressures on the development of achievement motives and values in Negro subgroups
- 3) to provide answers to questions about motivation and social status which result in academic and occupational failure

Lawrence W. Littig has recently conducted a project entitled "Personality Characteristics and Occupational Aspirations of Negro College Students". This project, carried out between July 1, 1965 and July 31, 1965, had the following objectives:

- 1) to compare students who are potential dropouts on the basis of personality differences and occupational aspirations
- 2) to compile exploratory data on the study population and develop ideas for future occupational research on problems of disadvantaged youth

Wallace A. Kennedy conducted a study of Negro intelligence and achievement between April 28, 1965 and December 31, 1965. The objectives of this study were:

- 1) to study the stability of Negro intelligence as measured by standard intelligence tests
- 2) to study the rate of achievement growth on a standardized achievement test
- 3) to study the nature of school dropouts in this population
- 4) to determine any special characteristics of the children who drop out and their work and living situations

P H Y S I C A L L Y H A N D I C A P P E D S T U D E N T S

It has long been recognized that employer prejudice has been a deterrent in securing employment for workers with disabilities. Advertising by Government and private agencies has been aimed at employers to assist the disabled worker in securing employment. A study was conducted by Rickard (1962) to determine prejudices against the employment of individuals with different types of disabilities for positions as third grade teachers and as accountants. It was found that competence was the most important factor governing the decision of employers. An Index of Employer Prejudice was designed to measure prejudice toward any disability group.

Jones, Gottfried and Owens (1966) conducted a study in which 186 high school students completed a paired comparisons questionnaire involving 12 exceptionalities and 7 interpersonal dimensions. The results revealed that acceptance of certain exceptionalities were sometimes related to interpersonal situations. Most frequently, however, the severely mentally retarded occupied the unfavorable end of the acceptance continuum and the gifted occupied the favorable end. Exceptionalities such as hard of hearing and partially seeing were most often near the favorable end of the acceptance continuum.

A study was conducted by Vogelson (1962) to compare selected variables related to work of a group of physically handicapped individuals and a group of psychiatrically handicapped individuals, both seeking selective placement assistance. The Bell Adjustment Inventory was administered to each subject to measure the four areas of personal adjustment: home, health, social and emotional.

The two groups differed significantly in home and emotional adjustment but not in social and health adjustment. The two groups did not differ in work attitude. The differences observed were wholly explained by the differences in home and emotional adjustment. The two groups differed significantly in both aspects of work history. The physically handicapped tended to be employed for a greater portion of their period of employability and also held jobs for longer periods of time than did the psychiatrically handicapped. There were statistically significant correlations for the physically handicapped group between work attitude and emotional, home, and social adjustment. For the psychiatrically handicapped group, there were statistically significant correlations between work attitude and emotional, home, health, and social adjustment. There were no statistically significant correlations between work attitude and the measured aspects of work history. For the physically handicapped there was a statistically significant correlation between the average length per job and emotional, home, and health adjustment, but not between the percentage of time employed and any aspect of adjustment. Neither aspect of work history was significantly related to any aspect of adjustment for the psychiatrically handicapped group.

A study by Block (1962) investigated the relationships between the independent variables of need for achievement, self-acceptance, and job satisfaction, and the dependent variables of attendance and supervisory ratings of quality and quantity of production of physically disabled male employees. The findings included the following:

- 1) need for achievement was positively correlated with industrial performance
- 2) the project did not support a hypothesis that self-acceptance was positively correlated with industrial performance
- 3) aspects of job satisfaction referred to as "satisfiers" showed

greater relationships with measures of industrial performance than did "dissatisfiers"

- 4) subjects high in both need for achievement and self-acceptance performed at a higher level than did subjects low in both, and the combined effects of these measures showed a greater relation to industrial performance than did either measure alone
- 5) no evidence was found to support the "hope of success" or "fear of failure" orientation in need for achievement
- 6) job satisfaction was less closely related to job performance for persons either high in both need for achievement and self-acceptance or persons low in both variables than it was for persons high in one and low in the other variable

S M A L L S C H O O L S

A funded research project entitled "Conference of Key Small School Administrators of the Northwest to Develop Vocational Education Programs for Small Isolated School Districts" has been conducted by Kenneth Ertel. Project dates were July 1, 1965, to August 31, 1965. The objectives were:

- 1) to stimulate administrators of small schools to assess the vocational training needs of their students
- 2) to orient administrators to trends and opportunities in vocational education
- 3) to develop cooperatively administrative solutions to small problems in offering vocational education programs

S O C I O E C O N O M I C

Several projects recently completed or underway appear in the project summaries of the United States Department of Health, Education, and Welfare. One is entitled "Production of a Motion Picture for the Training of Teachers in Programs of Human Relations in Teaching the Socially and Economically Disadvantaged". The principal investigator was Henry S.

Breitrose. Completion date was April 14, 1966. The objectives were:

- 1) to develop a motion picture for use by teachers, counselors, and school principals in working with disadvantaged youth, which will show the relationship between teachers' attitudes, expectations, and behavior and those of their students
- 2) to reveal the conscious and unconscious negative attitudes of teachers, counselors, and principals toward their work and their students
- 3) to show examples of positive attitudes
- 4) to show the satisfactions and rewards which may be gained from working with these students

Another study entitled "Anomie and Socioeconomic Status Among Adolescents" is under the direction of Sara Blackwell. The completion date is scheduled for December 31, 1966. The project has the following objectives:

- 1) to investigate the effects of anxiety, disorientation, and isolation in youth relative upon their success or vocational goals, and the relationship of these factors to the family and friendship patterns and their effect on the vocational planning of youth
- 2) to provide a degree of validity for the assumption that anxiety, etc. is related to failure
- 3) to develop tests for measuring these factors
- 4) to determine the incidence of anxiety, etc. within the high school population of upper New York State

An experimental project for "The Development and Evaluation of Educational Systems Packages for the Occupational Training of Depressed Area Students in Five Basic Subject Areas" received funding and the first phase was completed February 28, 1966. The project was under the direction of Don Bushnell and was to test the hypothesis that learning results are increased when instructional materials have been modified during tutorial sessions. Instructional units were developed for five basic subject areas: arithmetic, reading, writing, speech, and

manipulative skills.

Chris D. Duncan is the principal investigator for a project entitled "Socioeconomic Background and Occupational Achievement Extension of a Basic Model". The project began on June 1, 1965, and will end November 30, 1967. The objectives of the project are to determine the relationship that exists between factors such as education, first-job status, father's education, father's occupational status, and such social and psychological factors as ability, motivation, aspirations, primary-group and peer-group inter-reactions, and ethnic and environmental factors that govern access to opportunities.

Lloyd J. Phipps was principal investigator for a project entitled "A Study in Communication Between High School Teachers of Vocational Agriculture and Socioeconomically Disadvantaged Youth by the Use of the Symatic Differential". The project, to be completed August 31, 1966, had for its objective the measurement and comparison of the connotative meanings of a list of selected concepts for teachers of vocational agriculture and socioeconomically disadvantaged youth. An object of the study was to ascertain the degree to which the teacher of agriculture understands the values and meanings of concepts held by socioeconomically disadvantaged youth.

A project underway entitled "Teaching Preschool Children from Poor Families to Read and the Effect of This Training on School Success" is under the direction of Evan R. Keislar. The beginning date of the project was June 1, 1965, and the ending date will be May 31, 1970*.

The following are objectives of the project:

- 1) to determine the principles of language instruction that will increase the ability of socially and economically handicapped children to use language

- 2) to test the hypothesis that special instruction and the use of language with such children will result in improved language ability and more rapid academic progress during the first year of school
- 3) to discover the best ways of developing and using programmed instruction with language handicapped young children

A socioeconomic study involving children from lower class, upper-lower class, and middle class was conducted by John (1963). It was found that middle class children surpassed lower class children of the same chronological age in that they possess a larger vocabulary and a higher non-verbal I.Q. Group differences are less striking when comparing level of language ability. The middle class child has an advantage over the lower class child in tasks requiring precise and somewhat abstract language. The acquisition of more abstract and integrative language seems to be hampered by the living conditions in the homes of the lower class children. Opportunities for learning to categorize and integrate are rare in the lives of all young children. This type of learning requires specific feedback or tutoring, and such attention is far less available to the lower class child. Whatever their genesis, consistent class differences in language skills have here been shown to emerge between groups of children from the same subculture but of different socioeconomic classes. By systematically examining features of the preschool lives of the young children and clarifying their relationship to performance on language and conceptual tasks, it may be possible to facilitate the acquisition of these skills and thus improve educational methods for children of any class.

Gunderson and Nelson (1965) conducted a study to determine the relationship of parents' socioeconomic status to occupations of Navy personnel in Antarctica. A family socioeconomic status index was

derived from father's occupation and father's and mother's education. The enlisted ratings were divided into two groups that appear to correspond with civilian white collar and blue collar occupations. The results have indicated a significant relationship between parental socioeconomic status and occupational assignment in the Navy. Families with socioeconomic status involving parents who have not completed high school and holding blue collar jobs were associated with entry into Navy occupations that corresponded to the blue collar trades. The authors believe that the relationships which exist between socioeconomic status and occupational specialty would be even more pronounced in the Navy population at large than was the sample of Antarctica volunteers.

A study of group differences between upper and lower socioeconomic status gifted children was conducted by Frierson (1965). Group differences between various socioeconomic levels were found to exist and the findings emphasize the importance of controlling for socioeconomic status in studies where gifted and nongifted children are compared.

An exploratory study of social class and its effect on lower class children was conducted by Allen (1965). The major purpose was to describe social class awareness, self-identification, preferences, and perceptions of adult preferences in the age group from 3 to 12. All age groups manifested social class awareness, which increased as the children's age increased, showing the most significant increase in the age group first entering school. Social class self-identification was manifested by lower class children at all age levels covered by the study, and it tended to decrease as the children's age increased. Social class preference was manifested by the lower class children for middle-upper class appearance variables, and this preference tended to increase as the children's age increased. Lower class children tended

to perceive the social class preferences of authorities in the home environment as being different from the social class preferences of authorities in the school and community environment, and this difference tended to increase with increasing age. It was concluded that rejecting experiences provided in the middle class school help to reinforce the lack of self-respect in lower class children as reflected in their social class perceptions.

A four-phase program entitled "Improvement of Youth Through Vocationally Oriented Educational Programs for Disadvantaged Families in Depressed Rural Areas" is being conducted under the directorship of Lloyd Phipps. The phases will include a descriptive study of a depressed rural community, development and application of a "model" program, and an evaluation phase. Completion date is scheduled for May 31, 1970.

A project under the direction of Lassar G. Gotkin entitled "The Development of a Beginning Reading Skills Program" was begun July 9, 1965, with an anticipated completion date of October 31, 1966. The project objective was to develop a series of lessons to teach visual, auditory, and conceptual skills to basic beginning reading students. The lessons were particularly appropriate for the socially disadvantaged child.

U N D E R A C H I E V E R S

A funded project under the direction of John J. Shea entitled "Program for Recovering and Extending Potential for High School Under-achievers Seeking Entrance at a Regional Community College" has recently been completed. The project began July 1, 1965, and ended

June 30, 1966. The project had as its objectives:

- 1) to determine if a planned summer remedial program can prepare identified high school graduate underachievers for success in a two-year terminal program
- 2) to determine whether personal vocational counseling will have a differentiating effect on student goal achievement
- 3) to determine through follow-up procedures the degree to which both the remedial program and the underachievers succeed

W O R K O P P O R T U N I T I E S

"A Project Study of a Work Opportunity Center" under the direction of Raymond V. Nord has been funded, beginning June 1, 1965, and ending June 30, 1968. Its general objectives are to provide short-term skill training, job orientation, and instruction in related subjects to find out whether these experiences can lead toward a job and high school graduation for youth from one depressed urban area.

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