The bibliography presents approximately 100 references (1927-1975) on vocational training for severely handicapped persons. Arranged alphabetically by author's name, the listings usually contain title, source, date, and pagination information. Some citations also provide an abstract. (CL)
THE AMERICAN ASSOCIATION FOR THE EDUCATION OF THE
SEVERELY / PROFOUNDLY HANDICAPPED

A Selected Bibliography (partially annotated)
Related to the Vocational Training
of Severely Handicapped Persons

Compiled by: (1) Mike Friedle and Lucy Fox,
Supported in part by Grant No. OEG-0-73-613 to
the University of Wisconsin-Madison from the Depart-
ment of HEW, Bureau of Education for the Handicapped,
Division of Training Programs, Washington, D.C.;
April, 1974.
(2) Marc W. Gold
Children's Research Center, University of Illinois,
South First Street Road, Champaign, Illinois, 61820.

Experimental Education Unit
Child Development and Mental Retardation Center
University of Washington
Seattle, Washington
This project was supported by The Bureau
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The Slough Project of the National Society for Mentally Handicapped Children explored a method of family style living and integrated social and work training for the mentally handicapped adolescents (IQ range 30 to 50). Seventy-eight adolescents participated in the project. The project's keynote was freedom from an institutional approach with the objective of providing a viable alternative in community care. Adolescents were taught specific production skills, personal responsibility for their work, the ability to travel independently, the ability to handle money, and other social skills.

Barloff, G. S. & Tate, B. G. A demonstration sheltered workshop in a state institution for the retarded. Mental Retardation, 1966, 4(3), 30-34.

Discusses the initiation of the project, putting the idea to work, the business procedures involved, workshop supervision, description of its workers, and the role of the workshop in the institutional program.

Barloff, G. S. & Tate, B. G. Training the mentally retarded in the production of complex production: A demonstration of work potential. Exceptional Children, 1967, 33(6), 405-408.

Discusses a demonstration workshop project at Murdock Center in Butner, North Carolina. The purpose of the project was twofold: first, the complex assembly of a relay panel by mentally retarded persons; and, second, the offering of a short term training program in mental retardation to rehabilitation counselors and related personnel. Ten male residents, IQ range 40-60, participated in the program. Twenty operations made up the assembly design of the relay panel. Clients were expected to make wire connections and solder them. After one year in operation, the shop was in operation 6 hours a day, 5 days a week with 26 residents employed, IQ range from 31-81. The project proved its value not only as a demonstration of work potential, but it also provided a setting for the evaluation and training of residents considered for community return and regular employment.
Beckhan, A. S. Minimum intelligence levels for several occupations. 


Adequate diagnostic programs for the mentally retarded and other handicapped individuals are being given considerably more attention by rehabilitation workers. The article discusses the influence of different variables on the implementation of recommendations and the importance of the family in relation to the client's rehabilitation. Workers in the field of mental retardation should be concerned equally with the client's personal characteristics, his family and the community resources available to him.

Brophy, C. E. Vocational possibilities for the mentally retarded. 


Discusses how production rates were increased through the use of teacher praise. The simulated workshop environment was manipulated and techniques were employed that might be expected to increase the rate of production. The specific problem in the simulated workshop was rate. The students seemed to be performing at a relatively low rate. Systematic manipulation of several of the performance variables can increase production rate.


A combined educational-vocational program for multiply handicapped deaf children at the Ontario School for the deaf in Milton is described. Planning of the program, implementation problems, staffing procedures, use of consultative personnel, referral areas, and benefits of the program are discussed. The program provides on-the-job as well as classroom experience and, when possible, pupils are integrated into regular classrooms for deaf children.


Described is a group therapy approach used in training severely mentally retarded adolescents to work together. Retardates ranged from 16-32 years of age, and one-third were diagnosed as having mongolism, cerebal palsy, or epilepsy. The group consisted of 10 trainees and one instructor who worked together for 8 to 9 months. After demonstrated ability, the group obtained work on a piecework basis with payment dependent on group productivity.


Describes one approach to the development of more efficient and effective vocational training procedures: the direct application of principles of operant behavior in a work-training environment. Workshop staff should "find ways" to train the retarded rather than "find work" to match present skills. Evidence was cited in support of the application of behavior principles, specifically the techniques of functional analysis, shaping, operant discrimination, and chaining to the problem of training severely mentally retarded youth to function as effective workers.


Discusses the hypothesis that a "general ability" factor encompassing intellectual and psychomotor skills is related to job success. The results of the experiment supported this hypothesis: significantly high correlations between intellectual, psychomotor, and vocational measures indicated considerable overlap between these predictive indices and success on the job.


Discusses a support for the hypothesis that a "general ability" factor encompassing intellectual and psychomotor skills is related to job performance. Purpose of the experiment was (1) to investigate the value of the work sample technique (2) to measure job performance as a continuous variable, and (3) to assess the validity of the experimental job. Results supported the fact that psychomotor and intellectual abilities were highly intercorrelated and significantly related to performance on the job.


Topics that are discussed include: the basic principles of educating the deaf; a history of that education; the causes of hearing loss in children; the necessity of early assessment; and, some current trends and problems in education. Further presentations concern: pre-school training; the types of school organization and child placement; several aspects of school programs (including academic subjects); the development and problems of communication; the accomplishment and training of teachers; aspects of auditory amplification in actual use; vocational preparation; guidance services; and, the role of the family in education. Attention is also given to: the appraisal of problems; the difficulties of multiply handicapped children; psychological considerations; research; rehabilitation and prospects after formal education is completed (JM).

Task analysis, or the reduction of a task to its smallest component parts, is demonstrated here through trainable mentally retarded children for success in sheltered workshop activities. The purposes of the analysis are (a) to enable the teacher to teach by suitable small steps, and (b) to aid in locating a specific problem when a child encounters difficulty.


Sixty-four moderately and severely retarded individuals enrolled in four sheltered workshops learned to assemble a 15-piece and a 24-piece bicycle brake. Training procedures utilized information obtained from the basic psychological research on discrimination learning. One-half of the subjects worked with the parts of the training task brake as they came from the factory (Form-only). The others worked with parts that were color coded (Color-Form). Coding consisted of painting that surface of each part that is facing the subject when it is placed in the proper position for assembly. All groups worked with the parts of the transfer task brake as they came from the factory (form-only). Half of the subjects learned the tasks to a criterion of six correct out of eight consecutive trials, the other half performed 20 trials beyond criterion on the training task brake (overlearning). The Color-form Groups learned the training task brake significantly faster than the Form-only Groups. No significant overlearning effect was found.


This is a very brief comment on some issues related to interdisciplinary approaches in mental retardation. A distinction between interdisciplinary and multi-disciplinary is discussed.


This paper discusses an independent study program at the University of Illinois which is designed to give students an opportunity to work with normal or handicapped children. It also suggests some rules for setting up an independent study program.

Gold, H. W. The preparation of secondary teachers of the mentally retarded. In O. Brolin & B. Thomas (Chm.), Preparing teachers of
secondary level educable mentally retarded: Proposal for a new mode. Project Reprot No. 1, Department of Rehabilitation and Manpower Services, School of Education, Stout State University, Menomonie, Wisconsin, April, 1971.

The importance of teachers obtaining experiences similar to those for which their students are being trained is discussed, both in terms of life experiences and vocational experiences. The importance of instructional technology is also discussed.


This chapter describes concepts from basic research on attention theory and discrimination learning in a manner designed to make the concepts useful to teachers and others working with normal or handicapped children.


Sixty-four moderately and severely retarded individuals enrolled in four sheltered workshops learned to assemble a 15-piece bicycle brake and were then tested for transfer to a 24-piece bicycle brake. Fifty-three of the subjects were retested on both tasks after one year. Training procedures utilized information obtained from the basic psychological research on discrimination learning. One-half of the subjects worked with the parts of the training task brake as they came from the factory (Form-only). The others worked with parts that were color coded (Color-Form). Coding consisted of painting that surface of each part that is facing the subject when it is placed in the proper position for assembly. All groups worked with the parts of the transfer task brake as they came from the factory (Form-only). Half of the subjects learned the tasks to a criterion of six correct out of eight consecutive trials, the other half performed 20 trials beyond criterion on the training task brake (overlearning). The Color-Form Groups learned the training task brake significantly faster than the Form-only Groups. Overlearning did not affect transfer. The one year retention study yielded highly significant retention effects.

This is a brief comment on the need for society to examine its value structures which function to prevent the retarded from enjoying their inherent right to full participation in that society.


The intention of this chapter is to describe the present status of research on the vocational habilitation of the retarded and to propose directions for future efforts. This is not intended as a review of the literature. References are used only to support statements made and to provide the reader with resources for more in-depth study. The vocational training of mentally retarded individuals presently utilizes the resources of three primary disciplines: rehabilitation, psychology, and education. Research from these disciplines is discussed. Research from two other sources, Industrial Management and Industrial Engineering, not normally associated with rehabilitation is also discussed in terms of potential contribution to the field.

An attempt is made in this chapter to emphasize the importance of the relationship between principles developed in laboratory settings and the application of these principles to vocational training. For the reader who is content with existing levels of expectancy presently held by society and by professionals in the field, or who believes that we have succeeded so long as the retarded are kept busy in workshops or placed on any job, this chapter has little value. For those who believe that there is a substantial gap between how the retarded function vocationally, at present, and how they could function, this chapter contains descriptions of what is being done and what could be done to achieve the goal of maximum opportunity for growth.


A procedure to effectively and efficiently train moderately and severely retarded individuals to make fine visual discriminations is described. Results suggest that expectancies for such individuals are in need of examination. Implications for sheltered workshops, work activity centers and classrooms are discussed.

Sixteen moderately and severely retarded individuals learned to assemble a 12-piece bicycle brake and were retested for retention after six months. Performance of the group given verbal cues for the visual discriminations was superior to the performance of the No Verbal Cue Group. A highly significant retention effect was found for both groups.


Thirty-six mildly and moderately retarded sheltered workshop clients learned to assemble a 12-piece unit for which the parts were color coded. Subjects were randomly assigned to one of three groups, each of which received a different procedure for efficiently using and removing the color cue. Subjects who had the cue removed from each part following three consecutive correct discriminations on that part learned the task in the fewest trials. The procedures were presented within the context of a research program designed to apply and implement findings from basic laboratory research on learning and referred to as middle-road research. Implications were given for the application of the procedures used.


Retarded individuals, working either one or three hours per day for 10 days, under no external reinforcement condition, assembled a 14-piece bicycle brake. Mean production for the one-hour group was 24.9 units per hour per person and for the three-hour group 20.2 units per hour per person. Error rate was very low for both groups. The data were discussed relevant to presently held expectancies and practices in the vocational training and evaluation field.


This is a newspaper-type article describing Gold's position on diagnosis and testing, and suggesting alternatives.


This is a detailed request for a loan to capitalize an electronics printed circuit board assembly factory in which 50 severely handicapped individuals will work.

This is a chapter which focuses on four issues: (1) The importance of work as a means to status in society; (2) follow-up studies; (3) the testing movement; and, (4) the Competence-Deviance Hypothesis. The issues are presented as critiques of existing practices and the presentation of alternatives.


Project D.E.A.F. was established by an expansion grant from the Rehabilitation Service Administration of the Department of HEW in cooperation with the Ohio Bureau of Vocational Rehabilitation for the purpose of expanding Goodwill Industries of Central Ohio's Rehabilitation Program by offering comprehensive vocational rehabilitation services to deaf and hard of hearing individuals (and those with multiple handicaps) who could not benefit sufficiently from services provided elsewhere. The majority of clients, 206 total, functioned on the first grade level and below. Vocational Rehabilitation Methodology is outlined. Aspects of evaluation, personal and work adjustment, group sessions, counseling, communication skills class, and drivers' education class were summarized. (CB)

Handbook of Operation for the Special School District of St. Louis County, Missouri, St. Louis County Board of Education, Missouri Special School District, August, 1966.

Description of specialized classes for deaf, language impaired, and hard of hearing children; and inclusion of hearing conservation, hearing therapy, and speech correction programs and speech and language development classes in the public schools. The operation of educable, trainable, and moderately dependent educable classes and of the technical school providing vocational training are described. (MK)

Huddle, D. D. Work performance of trainable adults influenced by competition, cooperation, and monetary reward. *American Journal of Mental Deficiency*, 1967, 72, 190-211.


The purpose of the program was to assess objectively the effects of a bonus pay procedure on the productivity of "exit ward" patients.
The patients were examined as a function of introducing a bonus pay procedure. Work permits completed per hour served as the dependent variable, and coupons redeemable for canteen items served as reinforcers.


Described is a vocational rehabilitation program for mentally retarded blind persons that attempt to duplicate real life living and working situations. The program is designed for persons who are at least 16 years of age, who function on an intellectually or socially retarded level, and who need a vocational evaluation program. The program evaluates the individuals in 5 areas: mobility, personal and social adjustment, residential living, pre-vocational skills, and vocational potential. The flexible environment of the evaluation program is structured so that a trainee may progress from supervised work conditions to independent work situations.


The students' characteristics are presented with a brief description of program areas including academics, arts and crafts, home
economics, independent living, job training, music, physical education, and social perceptual training are provided. Follow up data examines adjustments in employment and community integration. Also described are the role of the case manager, program innovations, program support activities, cooperative school-rehabilitation centers. (RD)


To improve the behavior of those moderately and severely retarded no longer attending classes. A token economy was established at Denton State School. Good behavior was rewarded with social and recreational privileges. (JM)


The author questions some of the reigning assumptions among vocational rehabilitation professionals. These assumptions interfere with the provisions of services to many of the mentally retarded. First assumption: We know the level of intelligence for different kinds of jobs, therefore, we limit the mentally retarded person to certain unskilled jobs. Second: We assume a slow learner is necessarily a poor learner. Third: Intelligence is a constant and global quality. Fourth: We assume all mentally retarded persons
have the same type of personality. The author further cites implications of actions derived from these assumptions. He would minimize or avoid segregation of the mentally retarded as much as possible and adopt a more experimental approach to the vocational training, evaluation, and job placement of the mentally retarded.


This is a comprehensive newspaper article describing Gold's work.


Discusses the development and testing of a training procedure for severely retarded individuals. The four goals of the project were (1) formulating a training procedure (2) testing the training procedure in actual workshop use, (3) evaluating staff competencies, and (4) applying the procedures to other areas of severely and profoundly retarded institutional living.


A four year demonstration project at Indianapolis Goodwill Industries applied work adjustment knowledge, methods, and techniques to assist 200 clients, age 17-58, mean IQ = 90, who were severely disabled. After diagnostic evaluation, clients were assigned to a job. Supervisors, caseworkers, and psychologists provided support or criticism directed toward shaping work attitudes and helping the person see himself realistically. Of the 159 clients who completed the program, 129 were placed on jobs. Conclusions: the techniques used in the project were practical and effective for the majority of clients and the clients tended to show better adjustment. (RK)


Stroud, R. R. Work measurement in rehabilitation workshops: Time study and predetermined motion time systems. Regional Rehabilitation Research Institute, University of Maryland, College Park, 1970, Technical Monograph No. 2.


Yonnie, W. J. Increasing cooperation between school programs for the retarded and vocational rehabilitation services: An experimental teaching approach. Mental Retardation, 1966, 4(3), 30-34.

The author describes an experimental teaching project designed to help teachers bridge the gap in comprehensive programming for the retarded. The project's materials and techniques have been prepared to help pre-service and in-service teachers to improve the rehabilitation readiness of their pupils. The discussion includes the types of approaches used and reviews some of the problems that must be faced by personnel in special education and vocational rehabilitation, if cooperative plans for the retarded are to be instituted effectively.
