AN EVALUATION OF A UNIVERSITY BASED SUMMER CAREER EXPERIENTIAL AND EXPLORATION PROGRAM FOR MILDLY HANDICAPPED ADOLESCENTS

By

PATRICIA RUTH NELSON

Bachelor of Arts in Education
Northeastern Oklahoma State University
Tahlequah, Oklahoma
1972

Master of Arts
University of Tulsa
Tulsa, Oklahoma
1975

Submitted to the Faculty of the Graduate College
of the Oklahoma State University
in partial fulfillment of the requirements
for the Degree of
DOCTOR OF EDUCATION
May, 1983

AN EVALUATION OF A UNIVERSITY BASED SUMMER CAREER EXPERIENTIAL AND EXPLORATION PROGRAM FOR MILDLY HANDICAPPED ADOLESCENTS

Thesis Approved:

Lloyd Wiggins
Thesis Adviser

Eric W. Dugger

Wayne B. James

Scout Lee Gann

Norman N. Durham
Dean of the Graduate College

ACKNOWLEDGMENTS

I wish to express my appreciation to those persons whose interest and assistance made the completion of this dissertation possible. I am grateful to my chairperson, Dr. Lloyd Wiggins, and committee members, Dr. Waynne James, Dr. Cecil Dugger, and Dr. Scout Lee Gunn, whose suggestions and assistance are evidenced throughout this study.

A special note of gratitude is extended to my friend, Dr. Connie Joy, whose insistence made this event possible, and to Dr. William Zimmerman, colleague and friend, who edited and lent encouragement toward the final production of this dissertation. My gratitude is also given to those who participated in the Summer Career Exploration Program and made it all possible to the conduct of this dissertation.

I would like to thank my typist, Charlene Fries, who created a professional thesis from my cumbersome typing and handwritten scribes.

And last, the writer wishes to acknowledge those who stood by and kept the real world together: my son John and his wife Annie, my daughter Leslie and her husband Robert, and my sister Betty. May my grandson Philip James Hanan be inspired by this endeavor.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

INTRODUCTION

The nature of the problem which this study investigated denotes a symbiotic relationship between surplus population and lack of appropriate training which literature dealing with the mildly handicapped views as unresolved (Farber, 1968; Gold, 1973). One of the inhibiting factors Farber (1968) describes is the surplus population concept. According to Farber, a surplus population consists of those individuals not specifically trained, as well as those incapable of, unwilling to, or prevented from filling slots in the societal organization. He uses the term "surplus" in an organizational sense, meaning that there are more people than slots in the social organization and that the values of organizations take precedence over the needs of the workers. The mildly handicapped tend to be included in this population surplus by virtue of their assumed incompetence and deviance. This, in effect, inhibits their life-chances and insures the continued existence of their remaining in the organizational surplus population. The second inhibiting factor is compounded by a lack of appropriate training, perpetuated through special education and vocational training programs (Brolin, 1976; Kolstoe, 1960). One of the major criticisms of special education curricula has been the continued practice of placing emphasis on basic academics over the more pragmatic skills students need to master to meet special education's employability criteria (D'Alonzo, 1977; Neuhaus, 1967; Wehman, 1976). Brolin (1976)

reported that a common view held by experts in the field of mental retardation is that 75 to 85 percent of this population could achieve a competitive level in employment if better training and placement techniques were available. Halpern (1972) argues that the handicapped who are assisted by well structured vocational training programs have a good chance of finding jobs, regardless of the level of general community unemployment.

As early as 1952, Tizard and O'Connor criticized the traditional training method as providing a non-significant relationship between work performed in training situations and jobs likely to be obtained upon leaving the schools. Chaffin, Spellman, Regan, and Davison (1971) suggested that the function of secondary programs should not be conceptualized as making students employable but to maximizing that employability.

Public school programming for the Learning Disabled (LD) has not had the long historical beginning that accompanies the Educable Mentally Retarded (EMR) (Siegel and Gold, 1982). Rather, program development for children identified as LD evolved a little over ten years ago with the major options at the elementary level. There have been few designs for intervention or compensatory provisions to aid the performance of the LD adolescent (Deshler, 1978).

Work study programs are generally not provided for the LD adolescent. Secondary LD students were primarily guided into the traditional college bound curriculum with only a few alternatives in vocational education programs provided. This was due to guidelines that restrict participation to only the Severely Learning Disabled (SLD) adolescent. According to Grill (1978), the SLD are not likely to be literate, though they have a near normal intelligence range, are not competent in basic

mathematical skills, or even minimally socially competent. The Association for Citizens with Learning Disabilities reported that persons with handicaps obtain less than two percent of the placements in vocational and technical programs and then were in the menial training level programs.

Therefore, the symbiotic relationship between (1) society's organization surplus population and (2) the lack of appropriate training perpetuates an unending cycle that inevitably and negatively affects the mildly handicapped individual's quest for success in their occupations and community adjustment. Statistics that allude to program inappropriateness, reported by the Bureau of Education for the Handicapped (BEH, 1973), indicated that without career education training relevant to today's job market, meaningful to students' career aspirations and realistic to his/her fullest potential, 40 percent would unemployed and at the poverty level; 26 percent unemployed and on welfare; and 3 percent would totally be dependent and institutionalized.

Statement of the Problem

Thus, breaking of this symbiotic cycle, (1) societies organizational surplus population, and (2) the lack of appropriate training, would appear the most pertinent first step toward program planning for mildly handicapped adolescents. It is not their unwillingness to fill the societal organization work slots, but rather their prevention from accomplishing this due to the incapability problem. The incapability problem is further compounded by the lack of appropriate skill training. Therefore, the problem this study dealt with is: Can a seven-week career exploration and experiential program change mildly handicapped adolescents' performance?

Purpose of the Study

The purpose of this study was to evaluate the efficacy of a vocational career exploration teaching model designed for experiential intervention with mildly handicapped adolescents. Occupational possibilities were provided to assist participants in developing a pool of information about work environments and work personalities through several hands-on experiences. The objective of this program was, given an opportunity for vocational and social experiential training in realistic work settings, participants will develop successful work attitudes and find satisfying adjustment in the real adult work world and community. The career exploration experiential model provided realistic exposure through: Phase I, vocational opportunities in the community; Phase II, in-depth observation of job requirements; Phase III, supervised work placements; and Phase IV, social and cultural activities. Specifically, this study seeks to answer two questions:

1. Given a training model that provides a realistic exposure to vocational and social settings, will this affect change in participants' work values and attitudes toward work?

2. How effective is experiential intervention in a career exploration program for preparing mildly handicapped adolescents to develop knowledge about work opportunities, attitudes, skills, and social and cultural activities appropriate for assuming a satisfying adjustment in the real world of work?

Need of the Study

There appears to be some consensus among Special Educators (Brolin, 1982; Clark, 1975; Halpern, 1979; Kokaska, 1971; and Weisenstein, 1976)

that continuation of present vocational training programs and practices provided the mildly handicapped adolescent perpetuates their position in Farber's surplus population. Recent program studies (Brolin, 1982; Crain, 1980; Phelps and Lutz, 1977; and Richardson and Hill, 1980) depicted an unfavorable picture for the handicapped person who graduates or leaves public school. The cause was reported as traditional classroom procedure failed to train the handicapped to attain a level of success commensurate with their potentials. According to Gold (1975), the need for appropriate training, without exception, should be exposure rather than treatment. Therefore, information resulting from this study should provide a useful and practical vocational exploration model applicable to a special education work-study program for mildly handicapped adolescents.

Assumptions of the Study

The following assumptions are made:

1. Experiential intervention is a learning process.

2. The participants were representative of the employable population of the mildly handicapped adolescents.

3. The instruments used in this study were adequate for reporting exposure changes.

Limitations

The limitations are:

1. This study's findings and conclusions may not be applicable to some special education secondary work-study programs because of their aplication of limited experiential activities in their classroom programs.

2. The small population employed in the study limits its generalization to similar populations.

3. The lack of a control group limits generalization to similar populations.

Definitions of Terms

The following terms are used throughout the present document and are defined as follows:

Adolescence: The period that begins with the onset of puberty and ends when the individual is relatively independent of the emotional and financial bonds of the family unit and is able to function in the adult society (Marsh, Gearheart, and Gearheart, 1978; Kallum, 1980).

Mildly Handicapped: Educable Mentally Retarded, Emotionally Disturbed, Behavioral Disorders and/or Learning Disabled students with learning and cognitive difference who have a measured intelligence quotient between 70 and 100 (Dunn, 1973; Gearheart and Weishahn, 1976; Smith and Neisworth, 1975; Suran and Rizzo, 1979; Kamp, 1980; Kallum, 1980).

Experience/Experiential: Is an actual living through an event or events. The living through of the experience involves the total personality (Steinaker and Bell, 1979; Webster's New World Dictionary of the American Language, 1976).

Career Education: Is an integral lifelong process that encompasses all aspects of education and prepares individuals to become personally fulfilled, economically self-sufficient, and responsible citizens (Career Education: A Model for Oklahoma, 1974).

Career Exploration: Is an occupationally-oriented method designed for the purpose of exploring various work clusters and developing a personal value system (Career Education: A Model for Oklahoma, 1974).

CHAPTER II

REVIEW OF LITERATURE

A review of literature was replete with studies that were concerned with the neglect of vocational training and employment opportunities that would enable the mildly handicapped adolescent to achieve an economic level of self-sufficiency (Clark, 1975; Halpern, 1979; Kokaska, 1971; and Weisenstein, 1976). A number of studies (Brolin et al., 1975; Chaffin, Spellman, Regan, and Davison, 1971; Kidd, Cross, and Higginbothan, 1967; Nelson, 1975, 1978; Strickland and Arrell, 1967; and Zimmerman, 1975) revealed that vocational adjustment improved markedly if the mildly handicapped adolescent was provided with an occupational oriented program. This chapter reviewed the relevant literature on the current curriculum approaches and alternative curriculum proposals for the mildly handicapped adolescent.

Current Curricular Approaches

Secondary programs for the mildly handicapped adolescent reviewed for this project include a comparison of curricular approaches for the mentally retarded, comparison of curricular approaches for the learning disabled, literature review of programs serving both populations, perceived needs by the mildly handicapped and their teachers for survival, and current needs from the federal perspective. Traditional classroom instruction has occurred when information has been transmitted from the

instructor to the learner. Traditional educational instruction has failed to be successful with the mildly handicapped.

Gold (1973) reported that traditional academic approaches, particularly when used in the special education work-study programs, perpetuated non-successful workers, unsatisfactory job placements, and poor social adjustment among participants. Gold further noted that most entry-level jobs required a minimal level of basic academic skill performance, far less than being required of retarded adolescents. The imposition of an academic content curriculum was viewed as regular education's problem in adjusting to the specialized or modified curriculum needs of the mildly handicapped student at the secondary level (Heller, 1981). Heller recommended an examination and revision of secondary programs so they could meet employment and community living needs for the handicapped to be successfully integrated as productive members of the communities. Cegelka in an interview (Hawkins-Shepard, 1978) viewed the remedial academic programs offered at the secondary levels as too late for many EMR students; rather, emphasis should be upon preparing these people for adulthood and an expedited successful adjustment to their community. Gold (1973) contended the failure to provide appropriate vocational training related to the inappropriate expectancies held by both professionals and the public --that the handicapped, particularly the mentally retarded, could only perform in the simple menial tasks which required little training, minimal skills, or short-term attention. The conflict between those who advocated mainstreaming, with its regular classroom curriculum, as opposed to a practical skills curriculum for the handicapped were further compounded that the decision as to which was the most appropriate educational program for the mildly handicapped adolescent (Clark, 1979). Childs

(1979) contrasted the mildly mentally retarded adolescent with those peers who remained in self-contained special education classes and reported that there was no support for implementing mainstreaming with mildly mentally retarded adolescents.

Additional criticism has reported the lack of definite training programs and instructional technology. Most public school programs were defined by the literature as descriptive and concerned with the effects of in situ variables. These variables included I.Q., employment status, socioeconomic level, and utilization of follow-up studies as the primary measure of programmatic success. The experimental research in terms of manipulating training procedures was replete. Hauser (1978) reviewed articles, studies, and research reports of programs for the mildly handicapped adolescent and reported that the literature favored academic skills for the LD was reviewed two to three times more frequently than literature oriented toward career education or vocational training. Articles with a dual orientation both to academic and career/vocational was rare when compared to articles addressing only a single area. Academic educational oriented programs were reported to have appeared in the literature 5.5 times as frequently as data-based dual-oriented. Non-data-based academically oriented articles appeared 2.6 times more frequently than non-data-based dual-oriented articles. Thus, the literature proliferates the academic programs over those that were career/vocationally oriented.

In addition, Touzel (1978) employed a Delphi probe to learning disabled panelists and obtained the curricular requirements they reported to be most desirable. High level agreement, 69 percent of the respondents in agreement, reported that: (1) functional coping and survival

skills were a first priority; and (2) vocational and career development information were their second priority. The panel further responded that their academic remediation was not attained. McNutt and Heller, in a nationwide survey of 301 randomly selected local education agencies, discovered that 86 percent indicated that work and/or vocational education programs were available in addition to special education programming. Their most commonly identified need was the provision of appropriate vocational and career education programming for the LD students.

To understand the types of programs and services offered to secondary mildly handicapped adolescents, Deshler, Lowry, and Alley (1979) conducted a nationwide survey of 98 secondary LD teachers, one from each state except Louisiana and Hawaii. The percentage figure listed after each programming option represented the percentage of all programs surveyed that utilized that programming option. The results were:

1. 5 percent utilized work-study programming
2. 45 percent utilized basic academic remediation
3. 17 percent the functional curricular approach
4. 24 percent tutorial approach
5. 4 percent learning strategies approach.

Their follow-up requested that teachers describe the programs that appropriately served the severely LD adolescent. Their responses were that the functional and work-study was most appropriate. Their consensus for the mildly and moderately LD was a cooperative arrangement between the LD teacher and the regular teacher. These programs would stress coping skills needed to survive in the regular classroom with a college bound curriculum.

Vance (1977) suggested the need for combining academics with vocational preparation or development of a total vocational-career education program. Vance suggested that much research and many experimental programs in the area of the mildly handicapped need to be investigated. The areas of adaptive behavior, short- versus long-range skills, on-the-job training, and vocational guidance.

Kendall (1981) investigated three groups of LD adolescents that differed in social maturity and career attitude. Sixty subjects from five inner city high schools of a large metropolitan area were chosen. A cross section of male-female and black-white was represented. The three groups included: (1) 20 LD students enrolled in secondary classes, (2) 20 LD students enrolled in vocational training classes, and (3) 20 LD students integrated in the regular secondary classes and receiving additional support through learning resource centers. The Vineland Social Maturity Scale (Doll, 1965) was used to measure the subject's social maturity and the attitude scale of the Career Maturity Inventory (Crites, 1978) was used to determine career attitudes. The results demonstrated that social maturity of LD adolescents in regular classes and learning resource centers were lower than those of the vocational training class students. A small, non-significant career attitude difference was reported between the regular class and learning resource students with the learning resource students being the lowest. These results substantiated the claim that social maturity and career attitudes of LD adolescents support vocational programming.

Generally, a remedial program for LD focused on instruction of deficits primarily in the area of reading, spelling, and mathematics. Since students at the secondary level still lacked many of these basic academic

skills, programs were directed toward mastery of minimal academic competencies in these areas. A meager attempt to provide alternative programs, that emphasized functional life adjustment skills or vocational training, remained at a minimum number due to a lack of consensus concerning what constituted an appropriate educational program for the LD adolescent (Wiederholt and McNutt, 1979). Siegel (1974) observed that 85 percent of high school coursework for LD was readiness for college, in spite of the fact that only 20 percent of those graduating from high school LD programs ever pursued a college career.

The answer, according to Edwin Martin (1973), former Commissioner of the United States Office of Education's Bureau of Education of the Handicapped, was the Career Education concept. The Career Education concept met the total needs of the individual at all developmental stages, with vocational preparation as one of its key components. Interest in Career Education, in the early seventies, came about as a reform measure to heal regular education's inability to meet the learning interests and vocational needs of public school students.

Alternative Curriculum Proposals

Consequently, research and development funds were provided to design and implement four national career education models. Three of these models that have had the greatest impact in regard to the handicapped were: Clark's (1979) School-Based Model, Larson and Associates' (1978) Experience-Based Career Education Model, and Brolin's (1978) Life-Centered Competency-Based Model. Implementation of these models carried the ultimate responsibility of providing realistic, career relevant experiences and content materials to increase employability.

In 1960, it was recommended that the mildly MR should be provided with a realistic orientation to employment that fostered favorable work habits and attitudes (Kolstoe, 1960). Providing realistic occupational simulations or realistic job experiences permitted the mildly handicapped to develop the skills necessary for making the adequate and appropriate matches between their capabilities and appropriate career selections (Brolin, 1976; Fleres, 1975; and Kolstoe and Frey, 1965).

Several secondary school programs moved away from the traditional teaching methods and public school classrooms into real-world work centers. The "Actual Life Experience Program" (Alder, Deneve, and Retish, 1973) in Cedar Rapids, Iowa, prepares sophomores for the actual work experiences they will encounter during their junior and senior years. The work laboratory was located away from the high school in the business community. The intent was not to teach a specific job skill, but rather to introduce students to a number of work tasks and behaviors which proved valuable in a job situation.

Bitter (1967) stated that the hands-on/experiential exploration program for preparing the handicapped provides a direct, concrete, and more realistic experience for evaluation. Therefore, a more complete training program would not only include the mastery of skills, but also the generalization of thse skills to a more realistic environment where students can experience different work areas, different times of day, and/or different supervisors and behaviors. This met the experiential variety that often the handicapped lack or were denied.

One of the key concepts of Career Education was providing the balance between content material and experiential (hands-on) learning. Experiential activities, according to Lamkin (1980), were the key to

successful career education curricula. Further support (Bitter, 1967; Leggett, 1978; and Schulz, 1973) alluded to the effectiveness of the experiential approach related its importance to securing and keeping a job.

Steinaker and Bell, in their text The Experiential Taxonomy (1979), categorized the totality of an experience as: (1) Exposure, (2) Participation, (3) Identification, (4) Internalization, and (5) Dissemination. The experiential taxonomy as a Gestalt approach of human experience related closely to existing taxonomies of educational objectives (Krathwol et al. (1968), A Handbook on Educational Objectives: Affective Domain; Bloom (1964), A Handbook on Educational Objectives: The Cognitive Domain; and Simpson (1966), A Classification of Educational Objectives, Psychomotor Domain). However, the experiential taxonomy provided a more complete vehicle of planning, sequencing, implementing, and evaluating human experience in terms of the complex inter-relationship, teaching-learning interaction. This dealt with experiences as a total human activity rather than dividing that activity into its cognitive, affective, and psychomotor dimensions (Steinaker and Bell, 1979).

Experiential learning took place through acting, or in some situations, seeing another person act, and then experiencing or observing the consequences of action. Thus, it was through action that the memory of a previous action taken and the environmental response experienced was less inhibited by memory than by the organization of principles and ideas from facts that were inferred about the action. If one was to learn how to drive a nail, it is better to take a hammer and nail and experience through trial and error the procedure for nail driving rather than to read a book or attend a lecture about nail driving.

A realistic application of experiential learning for vocational and career education programs was exemplified by the American Industrial method of training individuals at entry-level positions, which provided experience on the job, making mistakes, and/or learning from another worker who already had mastered the task. Phelps and Lutz (1977) reinforced this concept and further expanded it by recommending that vocational programs train handicapped students to perform entry-level job skills prior to providing additional instruction. This enabled the student to experience success prior to the opportunity to be promoted to a more employable or permanent employment position.

Another consideration for support of experiential learning as opposed to the traditional special education work-study or vocational training programs was cost-effectiveness. This was measured against two factors: (1) methods and materials, and (2) their effects on training and placement outcomes. Applying this to recent studies relating to training (Brolin, 1982; Clark, 1981), employment and salaries (Biklen and Bogden, 1978) of the handicapped, it was reported that 85 percent were earning less than $7,000 and 52 percent were earning less than $2,000. Only 42 percent of the handicapped adults are productively employed as compared with 59 percent of the total adult population. Viscardi (1975) reported that only 4 million of the 11 million handicapped adults who could work were actually productively employed, and most of those were underemployed. A survey conducted by Schoepke (1979) further substantiated these conclusions. Out of 161 disabled persons, the rate of employment was 35 percent, 11 percent were in school, and 54 percent were neither working nor in school. Of the entire group, 64 percent reported they needed additional training. Among the experts (Clark, 1974; Brolin, 1982;

Kokaska and Kolstoe, 1977) in the field of Mental Retardation it was commonly viewed that 75 to 85 percent of the mentally retarded population could obtain a competitive employment level if improved training and placement techniques were available. Thus, assuming this population graduated from the traditional public school programs and possessed some vocational-technical school training, the cost in this respect far exceeded the effectiveness of the programs.

Until training objectives are specified in terms of specific, general, and saleable skills for competitive employment, meaningful training programs will not emerge (Gold, 1973). The systems approach (Gunn and Peterson, 1978) met these criteria. It provided a framework from which programs can be logically planned, conducted, and evaluated. It was based on an assessment of client needs and proceeded from there to the design of program content and process, which are related to the goals and outcome behaviors. This procedure provided a structure for evaluating how well the program is operating and allows a type of accountability not feasible in traditional program planning approaches. The model does not specify a particular population and can be easily adapted to any setting.

Summary

In view of this evidence, there appeared to be a need for delivery of appropriate vocational education and job training for the mildly handicapped adolescent. This was particularly true for the LD adolescent. The inefficacy of current programs became apparent when one considered that special education's sole purpose was to prepare these individuals for maximum participation if they were to survive in the real adult world

of work. Special education's ineffective approach was further evidenced by the limited opportunities for vocational training and job placements, and the continued practice of segregated low-level skills and training. These practices continued despite federal mandates and directives which demand appropriate vocational and career education from special education in general, and vocational education and vocational rehabilitation in particular.

Therefore, implementation of an experiential learning process, as a key component of the Career Education concept, was the primary focus of this study. The effectiveness of this program upon those participants in a summer career exploration program for mildly handicapped adolescents was evaluated using the systems approach model.

CHAPTER III

METHODOLOGY

Introduction

The purpose of this study was to evaluate the efficacy of a vocational career exploration teaching model designed for experiential intervention with mildly handicapped adolescents. Specifically, the study sought to answer two questions:

1. Given a training model that provides a realistic exposure to vocational and social settings, will this affect change in participants' work values and attitudes toward work?

2. How effective is experiential intervention in a career exploration program for preparing mildly handicapped adolescents to develop knowledge about work opportunities, attitudes, skills, and social and cultural activities appropriate for assuming a satisfying adjustment in the real world of work?

The method used for the study involved four stages. Those stages were:

1. Selection of Evaluation Design
2. Identification of Participants and Attendance Schedule.
3. Program Components and Delivery Strategies.
4. Collection of Data.

Each of these four parts were presented in this chapter.

Selection of the Evaluation Design

The systems approach provided a framework for the experiential program design, implementation, and evaluation. There were six basic components built into this systems model. These six components were:

1. Determination of purpose, goals, and objectives.
2. Design of a specific set of procedures and content to accomplish the purpose, goals, and objectives.
3. Delivery strategies.
4. Program implementation.
5. Management and monitoring procedures.
6. Evaluation of program.

The systems approach was participant centered. The specificity of this systems approach enabled participants to realistically have a way of monitoring their own progress through the program. The systems approach model provided an ongoing evaluation throughout the implementation of the program. The purpose of the selection of a formative evaluation model was to improve the program's effectiveness. The summative evaluation model provided the judgment of the program's effectiveness. The intent of this evaluation model was to collect both quantitative and qualitative data.

Identification of Participants and Attendance Schedule

Participants were ten adolescents (four females, six males) who were classified mildly handicapped by a certified school psychologist on the basis of individual intelligence tests and other assessible measurements

(i.e., three males, educable mentally retarded; two females, educable mentally retarded; one male, autism; two males, learning disabled; one female, learning disabled; and one female, physically handicapped). The participants' chronological ages ranged from 14 years to 20 years. Five Educable Mentally Retarded participants were referred to the program by their respective special education high school work-study teacher coordinators. One EMR participant was referred to the program through the Vocational Rehabilitation counselor at the Vocational Rehabilitation Agency in Tulsa, Oklahoma. The three LD participants and the one physically handicapped participant were referred from secondary special education teachers and/or special education department chairpersons.

The career experiential exploration program was conducted on the campus of the University of Tulsa in Tulsa, Oklahoma, from June 21, 1981, through July 24, 1981. The program was daily, Monday through Friday, from 9:00 a.m. until 12:00 noon.

Program Components and Delivery Strategies

The first components in implementing the systems approach for evaluating program effectiveness included development of a statement of the career exploration program's purpose, goals, and objectives as criteria of measurement. The statement of the program purpose was: to provide opportunities for mildly handicapped adolescents to explore realistic work settings, experience social and cultural activities that enable the acquisition and application of knowledge, skills, and attitudes necessary for successful work and community adjustment.

The goals established for the program included:

1. To increase an understanding of the real world of work by providing information and experiential activities regarding occupational opportunities within the community.

2. To enable their ability to make realistic work choices, participants will be given materials and observational training to assist analyzing occupational skills, work behaviors, tools, and materials.

3. To increase an understanding of the significance of work and their personal responsibility for maintaining a job by providing work try-out positions.

4. To increase participants' ability to facilitate interaction and participation in community and social and cultural experiences.

The objectives were included in the system approach process component: (1) Orientation to the Program and Campus, (2) Phase I--Group Field Trips. (3) Phase II--In-Depth Observation, (4) Phase III--Job Try-Out Placement, and (5) Phase IV--Social and Cultural Activities. These objectives were:

Orientation to the Program and Campus: When given the program purpose, a brief history of the University of Tulsa, a campus map followed by a tour of the University and its facilities, participants will verbally express and record information gained from this experience, and evaluate their interest on a Likert Scale (1 = low, 5 = high).

Phase I--Group Field Trips: When provided a description and purpose of the following business sites: (1) bank, (2) hospital, (3) hotel, (4) manufacturing plant, (5) aircraft plant, (6) newspaper office, and (7) port of shipping; making tours and given an information checklist of work levels; participants will be able to determine occupational possibilities appropriate to their level of abilities, needs, and interests; identify

various work environments and specific entry level jobs; formulate an occupational choice; select an appropriate occupational choice, identify other work alternatives. When asked to evaluate each of the seven field trips, participants will be able to discuss verbally and record information gained and measure their interest on a Likert Scale (1 = low, 5 = high).

Phase II--In-Depth Observation: When provided the instructional technique for observing and analyzing work and workers, and applying it to entry-level jobs in four visited business sites: (1) mail room and check processing area of bank; (2) food service, housekeeping, and laundry room in a hospital; (3) grounds and repairs in a University maintenance plant; and (4) printing, collating, and binding materials in a printshop of an oil tool supply company; using a job analysis checklist and interviewing workers, participants will demonstrate their ability to analyze occupational skills by identifying necessary manual and physical skills required of these entry-level jobs; identify competencies needed for job; and identify the following work behaviors: (1) social function and its relationships to co-workers and supervisors; (2) maintenance and quality; (3) accepting supervision and work demands; (4) work pressures associated with job; (5) formal and informal work environments; and (6) coffee and lunch breaks and staff meetings, etc. When asked to evaluate each of the four in-depth observations, participants will be able to discuss verbally and record information gained and measure their interest on a Likert Scale (1 = low, 5 = high).

Phase III--Job Try-Out Placement: When provided a description and given information of expectancies required of the following job placements: (1) preparing statements, stuffing envelopes, and filing account records for a janitorial service; (2) printing, collating, and binding

materials, and sorting mail for an oil tool supply company; and (3) playing, toileting, feeding, and caring for needs of children three to six years of age for a nursery service; participants will demonstrate through these job sites accepted performance by applying learning abilities to instruction given and facilitating required skills; organizing self and materials for performing accuracy, quality, neatness, productivity, and proper work habits (i.e., knowing what to do after completing an assigned task, knowing whom to see for new work assignments, and knowing whom to see if a problem arises). When asked to evaluate each of the three job try-out placement sites, participants will be able to discuss verbally and record information gained and measure interest on a Likert Scale (1 = low, 5 = high).

Phase IV--Social and Cultural Activities: When provided a description, behavioral expectancies, and facility of the social and cultural activity: (1) University art lecture; (2) community art museum tour; (3) University music lecture; (4) University theater lecture; (5) University television lecture; (6) public television station tour; (7) University physical education instruction and activity; (8) University library tour; and (9) public library tour; participants will demonstrate the ability to participate and interact in the activity as characterized by: (1) responding appropriately, and (2) demonstrate those appropriate behaviors ascribed to appreciative expression of these various activities. When asked to evaluate each of the nine social and cultural activities, participants will be able to discuss verbally and record information gained and measure their interest on a Likert Scale (1 = low, 5 = high).

Delivery Strategies

The delivery of strategies were composed of five levels of action

participation, developed as an intervention technique for the experiential treatment. They were structured as a measurable outcome of effectiveness experienced by the participants through the four major phases: (1) Group Field Trips, (2) In-Depth Observations, (3) Job Try-Out Placements, and (4) Social and Cultural Activities. The five levels of action participation were:

1. Introduction to Action
2. Action Stimulus
3. Action Involvement
4. Action Intake
5. Action Evaluation.

Introduction to Action

Level One was both an orientation to the events participants experienced and an assessment of the event if it were a part of their personal repertoire.

Action Stimulus

Level Two were the events where participants took group field trips, in-depth observations, job try-out placements, and social and cultural activities.

Action Involvement

Level Three occurred when the participants were actively experiencing those events. These involvements were divided into two sub-action forms: (1) participating action (observations, inquiring, listening); and (2) identifying action (personal application, interest, experience).

Action Intake

Level Four involved the internalization of these experiences whereby the participants were able to apply and expand these actions to different sets of activities and experiences.

Action Evaluation

Level Five occurred when participants, outwardly and inwardly, through shared expression of those events and the effects and influences upon themselves, internalized this knowledge for use in future employment choices and social and cultural activities.

Collection of Data

Two vocational oriented instruments were utilized for the pretest and posttest, the Ohio Work Values Inventory (Fenner and Hales, 1974), and Social and Prevocational Information Battery, Form T, Test 3--Job Related Behavior and Test 6--Job Search Skills (Halpern, Raffeld, Irvin, and Link, 1979).

The Ohio Work Values Inventory was selected as applicable to the career exploratory concept, that is, providing means for assisting participants to explore the meaning or value that work has for them. The test-retest reliability of the Ohio Work Values Inventory reported by Fenner and Hales (1974) were a high of .87 on Altruism to a low of .71 on Security. The sample size was 4,021 students enrolled in grades four through eleven in two midwestern states. Construct validity was validated using 1,976 protocols employing a verimax orthogonal rotation from which eleven factors were requested (Fenner and Hales, 1974). Four

additional research studies supported the criterion-related validity of the OWVI for grade levels, sex, social class, self-concept, and work values.

The Ohio Work Values Inventory assessed participants' intensity of evaluating 77 items by selection of one of five possible answers: (1) Not Much = 1 point, (2) A Little = 2 points, (3) Fairly Much--3 points, (4) A Lot = 4 points, and (5) Very Much = 5 points. Items were arranged in a cyclical format so that every eleventh item pertained to the same value. The range of points scored for each value were 7 to 35. After all items were scored, each column of seven numbers were added and the respective sums plotted on a Profile Chart under the appropriate value designator: Altruism, Object Orientation, Security, Control, Self-Realization, Independence, Money, Task Satisfaction, Solitude, Ideas/Data Orientation, and Prestige.

The two test selections from the Social and Prevocational Information Battery, Form 7, Test 3, Work Related Behavior and Test 6 Job Search Skills, were selected because of their designed appropriateness for evaluating decisions concerning training and program effectiveness. The internal consistency reliability for the Social and Prevocational Information Battery, Form 7 (Irvin, Halpern, and Reynolds, 1979) were reported from .78 to .87. Job-Related Behavior was reported at .79 and Job Search Skills was reported at .85. A canonical correlation was used to assess validity and the authors reported validity coefficients were .75 between the SPIB-T and a performance rating scale. The standardization population was 287 residents of group homes in the Western states.

The Social and Prevocational Information Battery, Form T, Test 3--Job Related Behavior and Test 6--Job Search Skills, required participants

to mark an X on the response form for their response either True or False. Test 3--Job Related Behavior consisted of 29 items. These items were intended to increase participants' awareness of (1) the role of supervisor, (2) how to communicate with co-workers and supervisors, (3) completion of a job, (4) work relations with fellow employees, and (5) personal habits affecting job success. Test 6--Job Search Skills consisted of 32 items. These items were intended to increase participants' awareness of (1) comprehension of want ads, (2) relationships between types of jobs and job requirements, (3) functions of job assistance agencies, (4) completion of job application forms, (5) knowledge of job sources, (6) the appropriate use of a telephone, (7) appropriate interview behavior, (8) ability to correctly complete a job resumé, and (9) the understanding of classified ads.

An instrument for evaluating field trips and University lectures indicated participants' response to these activities. Numerical values were assigned on a Likert Scale (1-5). Responses were tabulated as follows: (1) and (2) Lowest, (3) Medium, and (4) and (5) Highest.

Evaluation of participants' satisfaction with the career experiential exploration program included an 18-item questionnaire that evaluated all four experiential phases and utilized a Likert Scale. Numerical values were assigned to each response as follows: (1) Low, and (5) High.

The four In-Depth Observation sites and three Job Try-Out Placements participants were given a 25-item checklist of work behaviors and activities to be observed and recorded. Following each in-depth observation and job try-out placement, participants reported and described verbally their recorded information to other participants.

All tabulations were recorded as descriptive data and led to conclusions about the relative emphasis that experiential intervention had as a training model with mildly handicapped adolescents.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Introduction

The purpose of this study was to evaluate the efficacy of a vocational career exploration teaching model designed for experiential intervention with mildly handicapped adolescents. The method used for the study was the systems approach. The systems approach provided a discrepancy evaluation that compared actual outcomes with desired or planned outcomes. Thus, the area of difference between the real and intended outcomes isolated the area for investigation. Therefore, this led to the identification of factors that required modifications for program improvement. This method had three basic evaluation components: (1) input, (2) process, and (3) output.

Input

Input referred to those variables comprised of participants and objects involved in the program. Actual input data compared to the intended input to determine if a discrepancy existed.

Process

Process referred to the actions that were used to achieve the program's objectives. Evaluation of the process investigated the activities and interactions designed for the program.

Output

Output or outcome variables were the result of the terminal performance objectives that assessed the achievement of the desired outcomes. The discrepancy evaluation model depended on the relationships between input, process, and output variables.

The systems approach model provided an ongoing formative evaluation throughout the implementation of the program. The purposes of the formative evaluation were improvement of the program's effectiveness. The summative evaluation provided the judgment of the program's effectiveness. The evaluation model and design was based on seven process components and instruments based on their relevance to the overall evaluation: how effective were the experiential interventions in a career exploration program that prepared mildly handicapped adolescents to develop knowledge about work opportunities, attitudes, skills, and social and cultural activities appropriate for assuming a satisfying adjustment in the real world of work. The intent of this evaluation model was to collect both quantitative and qualitative data.

The presentation and analysis of data were organized as follows:

1. Analysis of pretest and posttests
    a. Ohio Work Values Inventory (OWVI) (Fenner and Hales, 1974)
    b. Social and Prevocational Information Battery, T Form (SPIB-T) Test 3 Work Related Behavior and Test 6 Job Search Skills (Halpern, Raffeld, Irvin and Link, 1979)
2. Analysis of career experiential activities of the exploration program through:
    a. Phase I: Group Field Trips
    b. Phase II: In-Depth Observation

c. Phase III: Job Try-Out Placement

d. Phase IV: Social and Cultural activities.

Analysis of Pretests and Posttests

Given an OWVI pretest and posttest each participant assessed his or her intensity of values to each of 77 items by selecting one of five possible answers: (1) Not Much = 1 point; (2) A Little = 2 points; (3) Fairly Much = 3 points; (4) A Lot = 4 points; and (5) Very Much = 5 points. Items were arranged in a cyclical format so that every eleventh item pertained to the same value. The range of points scored for each value was 7 to 35. After all items were scored, each column of seven numbers was added and the respective sums plotted on a Profile Chart under the appropriate value designations: Altruism, Object Orientation, Security, Control, Self-Realization, Independence, Money, Task Satisfaction, Solitude, Ideas/Data Orientation, and Prestige. The reading level was 2.8, which most subjects exceeded this level of reading and comprehension to complete the inventory without assistance. The results for these data are presented in Table I.

The determinate in an analysis of the data has shown a gain or loss based on the experiential treatment of the career exploration program. Therefore, in examining the gain or loss column in Table I, the following summation indicated that the ten subjects' greatest ranked value gain was Solitude (7.9), Prestige (4.1), Task Satisfaction (2.7), Security (2.0), Independence (2.0), Object Orientation (1.3), Money (1.3), Altruism (0.8), and Control (0.4). Loss determinants were Self-Realization (-1.1) and Ideas/Data Orientation (-0.8).

TABLE I

PARTICIPANTS' GAIN/LOSS SCORES ACCORDING TO PRETEST EXPERIENTIAL INTERVENTION AND POSTTEST RESULTS UTILIZING THE OHIO WORK VALUES INVENTORY

Variable of OWVI	Pretest X	Pretest SD	Posttest X	Posttest SD	Gain (Loss)
1. Altruism	27.0	6.43	27.8	7.25	0.8
2. Object Orientation	19.1	8.44	20.4	8.10	1.3
3. Security	27.8	6.49	29.8	3.68	2.0
4. Control	20.1	9.99	20.5	8.37	0.4
5. Self-Realization	28.3	7.21	27.2	3.10	(1.1)
6. Independence	23.5	6.52	25.5	7.78	2.0
7. Money	29.0	7.60	30.3	6.11	1.3
8. Task Satisfaction	28.9	6.90	31.6	2.37	2.7
9. Solitude	14.5	3.69	22.3	6.93	7.9
10. Ideas/Data Orientation	23.5	6.52	22.7	8.50	(0.8)
11. Prestige	21.5	8.76	25.6	8.88	4.1

According to the OWVI, the 11 values are categorized in the following way:

Intrinsic Values	Extrinsic Values
A. Altruism	A. Rewards of Work
B. Object Orientation	1. Control 2. Money 3. Prestige 4. Security
C. Self-Realization	
D. Task Satisfaction	B. Situate
E. Ideas/Data Orientation	1. Independence 2. Solitude

Situate values (extrinsic values, B) required for their realization the presence or existence of particular conditions which were variables of Independence (freedom from supervision) and Solitude (few close personal relationships). In the case of situate value, if the essential condition was absent, the work could still take place, although its value was not realized (Fenner and Hales, 1974).

Therefore, with regard to data analysis concerning extrinsic value as opposed to intrinsic value, participants' scores concerned with extrinsic value were greater with a show of six to five. Participants' scores, concerned with extrinsic value indicated that Solitude, a situate was given the higher gain (7.9). This suggested that participants preferred work that can be done by one person and encountered by other personnel only on occasions. A second situate, Independence, gain of 2.0 suggested that the necessary condition for Independence was the absence of supervision. An element of Control was expressed in this value, which was not given a high value (0.4), nevertheless was related to achieving independence in the sense that it reflected a managerial factor. Control indicated a leadership role. It is generally a consensus that

control and/or leadership were not usually a characteristic of the mildly handicapped adolescent.

Other extrinsic values as represented were Prestige (4.1), Security (2.0), and Money (1.3). These categories indicated that rewards of work were of value to participants. Prestige concerned the desire for work which brought the individual recognition and acclaim or association with important people. Security was concerned with work which was steady and dependable. Money indicated the importance of work which in turn provided an individual the opportunity to have a substantial income. Therefore, a value of money or income reflected a high valuation on security and prestige.

The two gains in intrinsic values--Task Satisfaction (2.7) and Object Orientation (1.3)--indicated that participants valued Task Satisfaction as work that was interesting and enjoyable. The gain in Object Orientation expressed the valuation of handling or manipulating objects such as tools, materials, or utensils, which tended to be readily apparent and measurable. Thus, indicating that if Task Satisfaction in working was attained through working with objects that were measurable of one's skill, then self-realization of one's potential was readily gained through utilization of his/her skills, abilities, or talents. However, Self-Realization was rated as a loss. The remaining value gain was Altruism (0.8), which signified a desire for involvement with other people in a helping, supportive, or service role.

Two areas that were analyzed as a loss were Self-Realization (-1.1) and Ideas/Data Orientation (-0.8). Self-Realization expressed a preference toward work whereby an individual could utilize his/her skills, abilities, or talents. The gain was personal growth and realization of

one's full potential. Ideas/Data Orientation indicated an importance of dealing with creating and communicating ideas. Therefore, in this sense, Self-Realization and Ideas/Data Orientation values were viewed as two weaknesses attributed to mildly handicapped adolescents. It appeared that these data answered the study's question No. 1, "If given a training model that provides a realistic exposure to vocational and social settings, will this affect change in participants' work values and attitudes toward work?"

Analysis of Job Related Behavior and Job Search Skills

Participants, given a pretest and posttest from two selections of the Social and Prevocational Information Battery, Form T (Halpern, Raffeld, Irvin, and Link, 1979), Test 3--Job Related Behavior and Test 6 --Job Search Skills, marked an X on the response thought true or false. Test 3--Job Related Behavior consisted of 29 items. Test 6--Job Search Skills consisted of 32 items. The results for these data are presented in Table II.

The Social and Prevocational Information Battery, Form T is a battery of nine tests specifically designed for mildly and moderately retarded adolescents and adults. However, its utility was applicable to other kinds of learning problems. The nine tests measured competencies and knowledge of skills regarded as important to work and community adjustment. Knowledge was seen as substantially related to performance. Therefore, the test provides a guideline for program planning in areas that show weaknesses.

TABLE II

PARTICIPANTS' GAIN/LOSS SCORES ACCORDING TO PRETEST AND POSTTEST RESULTS OF SOCIAL AND PREVOCATIONAL INFORMATION BATTERY, FORM T, TESTS 3 AND 6

Test	Pretest			Posttest		
	No. of Questions in Test	$\bar{X}$	SD	$\bar{X}$	SD	Gain (Loss)
Job Related Behavior Test 3	29	20.3	4.37	22.3	3.50	2.0
Job Search Skills Test 6	32	23.2	4.32	23.1	4.56	(0.1)

According to Table II, Test 3--Job Related Behavior (2.0), showed a gain of two points, suggesting that after program treatment participants' knowledge of the role of workers and work relations with employees had increased. Test 6--Job Search Skills, showed a loss (-0.1). This suggested that skills necessary for finding a job may not have been in the participants' repertoire before or after program treatment.

Overall Evaluation of Program Components

The data were analyzed by dividing the program components into: (1) seven field trips to work sites; (2) six University lectures; and (3) three community field trips--a total of 16 experiential activities. Participants rated a 9-item questionnaire using a Likert Scale of 1 to 5 (1 = low, 5 = high) for evaluation of strength and weaknesses of 16 experiential activities. The overall results for these data are represented in Table III. According to participants' response to the evaluation form, the item "Tour/Lecture Guide's Performance" was ranked as highest (Rank 1). This response was viewed as reflecting participants' possible respect for authority figures or intimidation, an attribute ascribed the mildly handicapped.

Effectiveness of the 16 experiential tours and/or lectures were reflected in participants' high rank of tour/lecture "length" being satisfactory (Rank 2), as well as "informative" (Rank 3), with "orientation" prior to tour/lecture satisfactory (Rank 4) and "questions" (Rank 5) and "interest" (Rank 6) regarded as meeting program criteria. However, items that dealt with jobs, "The tour/lecture offered a variety of different jobs," "The tour/lecture showed me a place I would like to work," and "The tour/lecture gave me a true picture of the job situation"

TABLE III

PARTICIPANTS' OVERALL EVALUATION FORM OF STRENGTHS AND WEAKNESSES OF 16 EXPERIENTIAL ACTIVITIES OF THE CAREER EXPLORATION PROGRAM

Questions Asked of Each Participant for Each One of the 16 Experiential Activities	Likert Scale Sum	Average Likert Scale Sum of 16 Activities 1 = Low, 5 = High	Rank
Tour/lecture guide's performance	667	41.68	1
Length of tour/lecture	622	38.87	2
The tour/lecture was informative	598	37.37	3
Orientation prior to tour/lecture	573	35.81	4
The tour/lecture answered a lot of my questions	555	34.68	5
The tour/lecture held my interest	551	34.43	6
The tour/lecture offered a variety of different jobs	551	34.43	6
The tour/lecture showed me a place I would like to work.	547	34.18	8
The tour/lecture gave me a true picture of the job situation	515	32.18	9

accorded lower ranking were viewed as a discrepancy of the objectives in Phase I--Group Field Trips. The results indicated that the participants needed more extensive guidance in meeting the following program objectives: (1) determining occupational possibilities appropriate to their level of abilities, needs, and interests; (2) identify various work environments and specify entry level jobs; (3) formulate an occupational choice; (4) select an appropriate occupational choice; and (5) identify other work alternatives.

The overall results of participants' evaluation of 16 experiential activities of the career exploration program are represented in Table IV. Experiential activities that provided the 10 participants hands-on involvement, or provided new and/or unusual experiences, or whose tour guides and/or lectures were very well prepared, participants ranked these activities on a high evaluation scale. These results demonstrated the effectiveness of experiential participation. It is of interest to note that University lectures, although ranked lower, apparently influenced participants' interest when field trips were made to support content of program.

Participants' Evaluation of the Career Exploration Program

The participants' evaluation of the career experiential exploration program utilized an 18-item Likert questionnaire with weights of 1 to 5 (1 = low, 5 = high). The overall results of participants' evaluation of the career exploration program are represented in Table V.

Although the ranking of activities involving jobs or work were lower as reported in Table III, the response toward jobs and University

TABLE IV

PARTICIPANTS' OVERALL EVALUATION OF 16 EXPERIENTIAL ACTIVITIES OF THE CAREER EXPLORATION PROGRAM

Experiential Activity	No. of Partici-pants	Average Likert Scale Sum	No. of Ques-tions	Average Overall Rating for 9 Questions 1 = Low, 5 = High	Rank
A Hotel Tour	10	40.9	9	4.54	1
An Aircraft Plant Tour	10	38.4	9	4.26	2
A Bank Tour	10	38.1	9	4.23	3
A University Lec-ture Tour	10	37.0	9	4.11	4
A Newspaper Tour	9	36.8	9	4.08	5
A Public Library Tour	10	36.1	9	4.01	6
A Medical Center Tour	9	36.0	9	4.00	7
A Public Television Tour	7	35.8	9	3.97	8
A Public Art Museum Tour	10	35.4	9	3.93	9
A University Televi-sion Lecture	9	35.2	9	3.91	10
A University Library Lecture	10	33.4	9	3.71	11
A Port of Shipping Tour	7	33.2	9	3.68	12
A University Physical Ed. Activity	9	32.5	9	3.61	13
A University Art Lec-ture	9	31.0	9	3.44	14
A Manufacturing Plant Tour	10	30.5	9	3.38	15
A University Music Lecture	9	29.2	9	3.24	16

TABLE V

PARTICIPANTS' OVERALL EVALUATION OF CAREER EXPLORATION PROGRAM

Question	Likert Scale Sum	No. of Respon-dents	Average Likert Scale Sum 1 = Low, 5 = High	Rank
I learned a lot about jobs in this course.	48	10	4.80	1
The course was well organized.	48	10	4.80	1
I felt my work placement was satisfactory.	45	10	4.50	3
I liked all of the campus lectures.	45	10	4.50	3
I felt like the Director cared about me.	45	10	4.50	3
I think the role-playing interviews will help me later.	45	10	4.50	3
I had a good time in this course.	45	10	4.50	3
This course held my interest.	44	10	4.40	8
I was encouraged to ask questions.	44	10	4.40	8
I learned from my work placement how to do a job.	41	10	4.10	10
I felt like I could express my own ideas and opinions.	40	10	4.00	11
We needed to go on more field trips to businesses.	39	10	3.90	12
I learned from the in-depth observations how to work on those particular jobs.	38	10	3.80	13
I would like to take a course like this again.	38	10	3.80	13
I would like more in-depth observations.	37	10	3.70	15
I would like fewer field trips to businesses.	36	10	3.60	16
The class moved too fast for me.	34	10	3.40	17
I liked some of the campus lectures.	26	10	2.60	18

activities would appear to partially answer the study's second question which was concerned with the effectiveness of experiential intervention in a career exploration program for preparing mildly handicapped adolescents to develop knowledge about work opportunities, attitudes, skills, and social and cultural activities. Statements relative to the above areas included: "I learned a lot about jobs in this course"(Ranked 1); "I felt my work placement was satisfactory"(Ranked 3); "I liked all campus lectures, etc." (Ranked 3); "I learned from my work placement how to do a job" (Ranked 10); "I learned from the in-depth observations how to work on those particular jobs" (Ranked 13). Other relevant data indicative to program change included statements: "I would like more of the in-depth observations," "The class moved too fast for me," and "I liked some of the campus lectures."

Data results representing participants' satisfaction with the In-Depth Observation and Job Try-Out Placement are represented in Tables VI and VII. Participants' experiential exposure to actual work observations (Ranked 13) and the desire for more exposure (Ranked 15) demonstrated that participants may learn more from actively investigating real jobs. Work placement satisfaction (Ranked 3) and what was learned from the experience (Ranked 10) suggested that hands-on learning could be related to satisfaction of job try-out placement.

TABLE VI

EVALUATION OF PARTICIPANTS' RESPONSE TO
IN-DEPTH WORK OBSERVATION

Questions From Participants' Overall Program Evaluation	Likert Scale Sum	No. of Respon-dents	Average Likert Scale Sum 1 = Low, 5 = High	Rank
I learned from the in-depth observation how to work on a particular job.	38	10	3.80	13
I would have liked more of the in-depth observations.	37	10	3.70	15

TABLE VII

EVALUATION OF PARTICIPANTS' RESPONSE TO
JOB TRY-OUT PLACEMENT

Questions From Participants' Overall Program Evaluation	Likert Scale Sum	No. of Respon-dents	Average Likert Scale Sum 1 = Low, 5 = High	Rank
I felt my work placement was satisfactory.	45	10	4.50	3
I learned from my work placement how to do a job.	41	10	4.10	10

CHAPTER V

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This study dealt with two specific questions:

1. If given a training model that provides a realistic exposure to vocational and social settings, will this affect change in participants' work values and attitudes toward work?

2. How effective is experiential intervention in a career exploration program for preparing mildly handicapped adolescents to develop knowledge about work opportunities, attitudes, skills, and social and cultural activities appropriate to assuming a satisfying adjustment in the real world of work?

The method used for the study involved four stages. These stages were:

1. Selection of Evaluation Design
2. Identification of Participants and Attendance Schedule
3. Program Components and Delivery Strategies
4. Collection of Relevant Data.

The systems approach model utilized in this study provided a framework for the experiential program design, implementation, and evaluation. The present study did not attempt to investigate all the relevant variables that the systems approach model afforded, but rather concentrated on the process component which provided the experiential activities

utilized to achieve the vocational career exploration program's objectives. This model provided both quantitative and qualitative data.

According to research studies, the need for appropriate vocational and/or career training, without exception, refers to exposure rather than treatment (Gold, 1973). By exploring work values and personal values through hands-on experiences, Phelps and Lutz (1977) contended that individuals tend to make more realistic career pursuits in their career preparation phase. Therefore, an effective career preparation program provides simulated activities and/or real occupational experiences to help individuals develop their own career options (Phelps and Lutz, 1977).

The present study investigated the effects of an experiential model that included four phases: (1) Phase I--Group Field Trips, (2) Phase II --In-Depth Observations, (3) Phase III--Job Try-Out Placement, and (4) Phase IV--Social and Cultural Activities.

Findings

According to the pretest-posttest component, the 10 participants (4 females, 6 males) were classified as mildly handicapped with a chronological age range from 14 years to 20 years. All participants were referred to the program as having problems in work values and attitudes, work and social adjustment, and/or a general need for vocational career exploration training. Only two participants had been or were employed (one female EMR was part-time at a flower shop, and one male LD was part-time at a local ice cream store).

Examination of data from the pretests and posttests of the Ohio Work Values Inventory conveyed several characteristics common to mildly handicapped adolescents, their work attitudes and adjustment toward work

scores. The highest rated work value, Solitude (7.9), indicated participants preferred work performed by one person and encountered by other workers occasionally. Related to solitude but not rated as high, were the work values of Independence (2.0) and Control (0.4). The necessary condition for independence was viewed as the absence of supervision. The element of Control, a managerial factor, reflected independence being achieved through control of others. Therefore, this supports the participants' preference for solitude with only minimal supervision. In contrast, Altruism (0.08) at opposite rating extremes of Solitude implied that people involvement was acceptable to the participants if participation were of supportive or service roles. This could be a subtle inclination toward outside control. These findings supported Brolin's (1976) findings that the most common reasons the mentally retarded worker fails on jobs was their inability to deal with interpersonal relationships. This preference for solitude may be indicative of their motivation to become failure avoiders rather than success strivers (MacMillan, 1971). The present study's results suggested that expressed work values may be precipitated by limited vocational training experiences occurring in segregated and/or simulated settings that are incongruent with the participants' social needs and personal abilities. Therefore, following experiential treatment through the program's group field trips, in-depth observations, and job try-out placements, it was speculated that participants' exposure to the demands of the real world of work tended to increase their value of Solitude rather than alleviate its symptoms.

The second and third highest rated work values, Prestige (4.1) and Task Satisfaction (2.7), revealed an insight to potential strengths. Prestige, according to Fenner and Hales (1974), does not necessarily

express self-elevation, but can be interpreted as taking pride in one's work. This is an appropriate attribute when demonstrated by the handicapped workers. Task Satisfaction is reported to be a correlate of Prestige interpreted as enjoying one's work and looking forward to going to the job. Correlated with Task Satisfaction is Object Orientation (1.3), manipulating tools, materials, and utensils, etc., which are observable and measurable skills. Therefore, successful handling of objects could be evaluated, providing a worker satisfaction feedback. Participants with low rating on Task Satisfaction is predictive of their limited training in developing necessary skills for working with objects, rather than noninterest in object manipulation. These two work values, Prestige and Task Satisfaction, supported the present study's view which is dramatically opposed to Farber's (1968) surplus population theory, which Farber conveys an unwillingness of this population to work. The term "unwillingness" is broadly interpreted as lacking pride in their work or not enjoying their work and looking forward to going to work. However, it has appeared that deprivation of specific training in object manipulation supported Farber's theory that those who comprise the surplus population are not specifically trained to be integrated into the work force.

The work values of Security (2.0) and Money (1.3) are viewed as being related in the sense that steady and dependable work provided by both. The lesser rated subjects on security and money were postulated as lacking the opportunities to experience these values. Studies concerned with employment and earnings (Biklen & Bogdan, 1978; Viscardi, 1975) express little hope for the handicapped ever achieving a level of substantial income.

Two areas investigated which recorded a loss, Self-Realization (-1.1) and Ideas/Data Orientation (-0.08), were no surprise. Self-realization was a work value that expressed a preference toward work whereby an individual could utilize his/her skills, abilities, or talents. The achievement criteria are personal growth and realization of one's full potential. The work value of Ideas/Data Orientation expressed its function as creating and communicating ideas.

According to OWVI, the work values of Task Satisfaction and/or Object Orientation should relate with Self-Realization. In essence, this relationship is perceived as work satisfaction leading to self-realization, which is fulfilling one's potential skills, abilities, and talents. However, in evaluating this premise, as it applied to participants' ratings, realizing one's worth as a worker needs to precede work satisfaction. Discrepancies that affect self-worth, according to studies (Balla & Zigler, 1979; Sterlicht & Deutsch, 1972), are perceived as defensive behaviors which lead those who are handicapped (i.e., mentally retarded in particular) into situations where they cannot cope. This results in feelings of inadequacy, self-denial, resentment, and frustration. Rogers (1951) suggested that optimal adjustment requires that an individual feel a sense of self-worth. Therefore, the process for work satisfaction, as investigated in this study, should start correcting those discrepancies that hinder subjects from obtaining this feeling of self-worth.

Finally, in the findings of the pretests and posttests of the OWVI, the scoring of loss found in Ideas/Data Orientation does not represent the mildly handicapped adolescents as not creative or absolutely limited

in communication of ideas. Rather, it is noted as disinterest and further elaboration is not seen as significant to this study.

From the pretests and posttests administered to participants concerning Job Related Behavior (Test 3, Social and Prevocational Information Battery, Form T) and Job Search Skills (Test 6, Social and Prevocational Information Battery, Form T) following treatment (i.e., experiential activities of the career exploration program) participants hands-on to touring work sites, in-depth observations, and job try-out placements increased their knowledge according to Test 3, Job Related Behavior (2.0) criteria of: (1) the role of supervisor, (2) how to communicate with co-workers and supervisors, (3) completion of a job, (4) work relations with fellow employees, and (5) personal habits affecting job success. The loss indicator associated with Test 6, Job Search Skills (-0.1) suggests participants were not knowledgeable in: (1) comprehension of want ads, (2) relationships between types of jobs and job requirements, (3) functions of job assistance agencies, (4) completion of job application forms, (5) knowledge of job sources, (6) the appropriate use of a telephone, (7) appropriate interview behavior, (8) ability to correctly complete a job resumé, (9) and the understanding of classified ads, although this information had been included in their classroom instruction. It is speculated this loss was attributed to the assumption that job search knowledge was a part of participants' repertoire prior to their attending the summer program. Therefore, summer program de-emphasizes the importance of understanding the newspaper as an experiential activity.

The final findings of the effectiveness of experiential activities as a teaching model evaluated through the data were acquired from: (1) Participants' Overall Evaluation Form of Strengths and Weaknesses of 16

Experiential Activities (Table III); (2) Participants' Overall Evaluation of 16 Experiential Activities of the Career Exploration Program (Table IV); (3) Participants' Overall Evaluation of the Career Exploration Program (Table V); (4) Evaluation of Participants' Response to In-Depth Work Observation (Table VI); and (5) Evaluation of Participants' Response to Job Try-Out Placement (Table VII). Examination of these data indicated that the participants were exposed to seven field trips to work sites, six University lectures, and three community field trips (total of 16 experiential activities) conducted during the seven-week program. These experiential activities demonstrated that reality involvement improved participants' ability to evaluate vocational and/or career opportunities and alternatives, and broaden social and cultural exposure. These findings can be interpreted as: (1) taking the decision of participants' rating of experiential activities, and (2) utilizing respondents' rating of 5 = high rank.

Tours and/or lectures that provided participants' involvement (Table IV), i.e., a University theater lecture, a newspaper tour, and a University television lecture; or provided a new or different experience (Table IV), i.e., a hotel tour, a medical center tour, a public television tour, and a public art museum tour; and/or very well prepared guides of lectures (Table IV), i.e., an aircraft plant tour, a bank tour, and a public library tour were rated highly by participants, thus demonstrating the utility for planning activities that provide these kinds of experiential interventions. Further, generalizing activities from the training base to the community was seen as strengthening transfer of learning.

The findings of Table VI (Evaluation of In-Depth Observation) and Table VII (Evaluation of Job Try-Out Placement) indicated from

participants' responses that in-depth observation was beneficial to their learning, while work placement not only demonstrated work performance but participants found work try-out satisfactory.

Conclusions

Based on the data analyzed, certain conclusions seem appropriate. These conclusions are:

1. Work values strongly suggested program emphasis for mildly handicapped adolescents should deal with developing personal work interaction, self-realization as being worthy before work satisfaction is realized, acquiring a more steady and dependable work situation, and providing training in a variety of skills involving tools, materials, and utensils.

2. Experiential activities that provided subjects with tours to work sites, in-depth observations and job try-out placement met criteria for acknowledging the role of supervisor, communication with co-workers, completion of a job, work relations with fellow employees, and personal habits affecting job success by specifically identifying the competencies individuals need as they prepare for work and an independent adult life rule.

3. Experiential activities of classroom instructions did not meet criteria of job search skills. The limitations of this activity were seen as assuming knowledge to be in participants' repertoire, thus reinforcing to strengthen job search skills.

4. Group field trips, in-depth observations, job try-out placements, and social/cultural activities analysis demonstrated that strengths in participants' experiential activities basically involved direct participation.

The conclusions support the effectiveness of the experiential model as an appropriate teaching procedure for mildly handicapped adolescents enrolled in a career exploration program.

Recommendations

In view of the data, the following recommendations seem appropriate that programming for mildly handicapped adolescents should provide:

1. Training to correct personal work interaction deficits, self-worth, and provisions for acquiring appropriate skills in a variety of objects.

2. Experiential training that prepares students for job search skills and job-related behaviors.

3. Experiential training that provides students with field trips to work sites, in-depth observations, and job try-out placements.

4. Experiential training that provided opportunities for social and cultural activities.

BIBLIOGRAPHY

Alder, S., Deneve, R., and Retish, P. M. The John F. Kennedy School Work-Study Program. Education and Training of the Mentally Retarded, 1973, 8(2), 27-29.

Balla, D., and Zigler, E. Personality Development in Retarded Persons. In N. E. Ellis (Ed.), Handbook of Mental Deficiency. 2nd ed. Hillsdale, N.J.: Lawrence Erlbaum, 1979.

Biklen, D., and Bogdan, R. Handicappism in America. Win, October 28, 1978.

Bitter, J. A. Using employer job sites in evaluation of the mentally retarded for employability. Mental Retardation, 1967, 5(3), 21-22.

Bloom, B. S., Englehart, M. D., Ferrett, E. J., Hill, W. H., Krathwohol, D., and Krathwohol, R. (Eds.). A handbook of Educational Objectives: The Cognitive Domain. New York: David McKay, Inc., 1964.

Brolin, D. Programming retarded in career education. In J. Girard (Ed.), Perspectives: Career Education. Lawrence, Kansas: Department of Special Education, University of Kansas, 1975.

Brolin, D. E. Vocational Preparation of Retarded Citizens. Columbus: Charles E. Merrill Publishing Company, 1976.

Brolin, D. E. Life-Centered Career Education: A Competency-Based Approach. Reston, Va.: The Council for Exceptional Children, 1978.

Brolin, D. E. Vocational Preparation of Persons With Handicaps. Columbus: Charles E. Merrill Publishing Company, 1982.

Career Education: A Model for Oklahoma. Developed jointly by staff of the Oklahoma State Department of Vocational and Technical Education, and Sand Springs Independent School District No. 2. Sand Springs, Okla: Sand Springs Public Schools, 1974.

Chaffin, J., Spellman, C., Regan, E., and Davison, R. Two follow-up studies of former mentally retarded students from the Kansas work-study project. Exceptional Children, 1971, 37(10), 733-738.

Chaffin, J. Will the real "mainstreaming" program please stand up? (or . . . should Dunn have done it?) In E. L. Meyen, G. S. Vergason, and R. J. Whelen (Eds.), Alternative for Teaching Exceptional Children. Denver: Love Publishing Company, 1975.

Childs, R. E. A drastic change in curriculum for the educable mentally retarded child. Mental Retardation, 1979, 17(6), 298-300.

Clark, G. Career education for the mildly handicapped. Focus on Exceptional Children, 1974, 5, 1-10.

Clark, G. M. Mainstreaming for the secondary educable retarded. Is it defensible? Focus on Exceptional Children, 1975, 7, 1-5.

Clark, G. M. Career Education for the Handicapped Children in the Elementary Classroom. Denver: Love Publishing Company, 1979.

Clark, G. Clark's school based model. In D. E. Brolin, Vocational Preparation of Persons With Handicaps. 2nd ed. Columbus: Charles E. Merrill Publishing Co., 1981.

Crain, E. J. Socioeconomic status of educable mentally retarded graduates of special education. Education and Training of the Mentally Retarded, 1980, 15(2), 90-94.

Crites, J. O. Career Maturity Inventory: Attitude Scale. Monterey, Ca.: CTB/McGraw-Hill, 1978.

D'Alonzo, B. J. Trends and issues in career education for the mentally retarded. Education and Training of the Mentally Retarded, 1977, 12, 156-158.

Deno, E. Vocational training for the retarded. Exceptional Children, 1960, 26, 166-172.

Deshler, D. Issues related to the education of learning disabled adolescents. Learning Disability Quarterly, 1978, 1, 2-10.

Deshler, D., Lowrey, N., and Alley, G. R. Programming alternatives for learning disabled adolescents: A nationwide survey. Academic Therapy, 1979, 14(4), 389-397.

Doll, E. A. Vinland Social Maturity Scale. Circle Pines, Minn.: American Guidance Service, 1965.

Dunn, L. M. An overview. In L. M. Dunn (Ed.), Exceptional Children in the Schools: Special Education in Transition. 2nd ed. New York: Holt, Rinehart and Winston, 1973.

Dunn, L. M. Exceptional Children in the Schools. New York: Holt, Rinehart and Winston, 1975.

Farber, B. Mental Retardation: Its Social Context and Social Consequences. Boston: Houghton Mifflin, 1968.

Fenner, B. J., and Hales, L. W. Ohio Work Values Inventory. Monterey, Ca.: Publishers Test Service, 1973, 1974.

Fleres, C. N. An experiment in the pre-occupational education of mentally retarded students on the junior high school level. Education and ing of the Mentally Retarded, 1975, 10(1), 26-29.

Gearheart, B. R., and Weishahn, M. W. The Handicapped Child in the Regular Classroom. St. Louis, Mo.: C. V. Mosby, 1976.

Gold, M. Research on the vocational habilitation of the retarded: The present, the future. In N. R. Ellis (Ed.), International Review of Research in Mental Retardation. Vol. 6. New York: Academic Press, 1973.

Grill, J. J. School programming for adolescents. Academic Therapy, 1978, 13(4), 389-399.

Gunn, S. L., and Peterson, C. A. Therapeutic Recreation Program Design Principles and Procedures. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1978.

Halpern, A. S. Longitudinal evaluation of work/study programs for the educable mentally retarded in Oregon. Working Paper No. 62, Rehabilitation Research and Training Center in Mental Retardation, University of Oregon, August, 1972.

Halpern, A. S. Adolescents and young adults. Exceptional Children, 1979, 45(7), 518-523.

Halpern, A., Raffeld, P., Irvin, L., and Link, R. Social and Prevocational Information Battery--Form T. Monterey, Calif.: CTB/McGraw-Hill, 1979.

Hauser, C. Education for mildly handicapped adolescents: Structure and quality of published information from the past decade. The Journal of Special Education, 1978, 12(3), 285-301.

Hawkins-Shepard, C. Career education strategies and dilemmas: A conversation with Patricia T. Cegelka and John Dowey. Education and Training of the Mentally Retarded, 1978, 13(1), 92-101.

Heller, H. W. Secondary education for handicapped students: In search of a solution. Exceptional Children, 1981, 47(8), 582-583.

Irvin, L, K., Halpern, A. S., and Reynolds, W. M. Social and Prevocational Information Battery, Form T. Monterey, Ca.: Publishers Test Service, 1979.

Kallam, M. The relationship between simulation game play and the oral conceptualization skills of mildly handicapped adolescent students. (Unpublished Master's thesis, University of Tulsa, 1980.)

Kamp, S. H. The relationship between practice during an extended school year and long-term memory retention with mildly handicapped students. (Unpublished Ph.D. dissertation, University of Tulsa, 1980.)

Kendall, W. J. Affective and career education for the learning disabled adolescent. Learning Disability Quarterly, 1981, 4, 69-75.

Kidd, J., Cross, T., and Higginbothan, J. The world of work for the educable mentally retarded. Exceptional Children, 1967, 33, 648-649.

Kokaska, C. J. The need for economic security for the mentally retarded. In B. Brolin and B. Thomas (Eds.), Preparing Teachers for Secondary Level Educable Retarded: Proposal for a New Model. Menomonie, Wis.: Stout State University, 1971.

Kokaska, C., and Kolstoe, O. P. Special education's role in career education. Journal of Career Education, 1977, 3, 4-18.

Kolstoe, O. P. The employment evaluation and training program. American Journal of Mental Deficiency, 1960, 65, 17-31.

Kolstoe, O. P., and Frey, R. M. A High School Work-Study Program for Mentally Subnormal Students. Carbondale: Southern Illinois University Press, 1965.

Krathwohol, D., Bloom, B. S., and Masia, B. B. (Eds.). A Handbook of Educational Objectives: The Affective Domain. New York: David McKay, Inc., 1968.

Lamkin, J. S. Getting Started: Career Education Activities for Exceptional Students (K-9). Reston, Va.: The Council for Exceptional Children, 1980.

Larson, C. et al. Experience-based career education model. In D. E. Brolin, Vocational Preparation of Persons With Handicaps. 2nd ed. Columbus: Charles E. Merrill Publishing Co., 1982.

Larson, C. Personal communication regarding the Experienced-Based Career Education Model, 1978. In D. E. Brolin, Vocational Preparation of Persons With Handicaps. 2nd ed. Columbus: Charles E. Merrill Publishing Company, 1982.

Leggett, C. L. Special education and career education: A call for new partnership. Education and Training of the Mentally Retarded, 1978, 13(2), 430-431.

MacMillan, D. L. The problem of motivation in the education of the mentally retarded. Exceptional Children, 1971, 37, 579-86.

Marsh, G. E., II, Gearheart, C. K., and Gearheart, B. R. The Learning Disabled Adolescent: Program Alternatives in the Secondary School. St. Louis, Mo.: C. V. Mosby, 1978.

Martin, E. An address at the National Topical Conference, Washington, D.C., 1973.

McNutt, C., and Heller, G. Services for learning disabled adolescents: A survey. Learning Disability Quarterly, 1978, 1, 101-104.

Nelson, P. R. An Oklahoma Work-Study Program: Six Year Follow-Up Survey. Paper presented at the National Conference of the Council for Exceptional Children, Division for Career Development, St. Louis, Mo., February, 1975. International Conference for the IV Scientific Study on Mental Deficiency, Washington, D.C., August, 1978.

Neuhaus, E. Training the mentally retarded for competitive employment. Exceptional Children, 1967, 33, 635-638.

Phelps, L. A., and Lutz, R. J. Career Exploration and Preparation for the Special Needs Learner. Boston: Allyn and Bacon, Inc., 1977.

Richardson, N. R., and Hill, J. An evaluation of vocational placement success at the comprehensive rehabilitations center: A third measurement. Rehabilitation Literature, 1980, 41(1-2), 19-22.

Rogers, C. R. Client-Centered Therapy. Boston: Houghton Mifflin, 1951.

Schoepke, J. M. Lifelong career development needs assessment study. Working Paper No. 3. Columbia: University of Missouri, July, 1979.

Schulz, J. B. Simulation for special education. Education and Training of the Mentally Retarded, 1973, 8(3), 137-140.

Siegel, E. The Exceptional Child Grows Up. New York: E. D. Sutton, 1974.

Siegel, E., and Gold, R. Educating the Learning Disabled. New York: Macmillan Publishing Company, 1982.

Simpson, E. The Classification of Educational Objectives, Psychomotor Domain. Champaign-Urbana, Ill.: University of Illinois Press, 1966.

Smith, R. M., and Neisworth, J. T. The Exceptional Child: A Functional Approach. New York: McGraw-Hill, 1975.

Steinaker, N. W., and Bell, M. R. The Experiential Taxonomy: A New Approach to Teaching and Learning. New York: Academic Press, 1979.

Sternlicht, M., and Deutsch, M. R. Personality Development and Social Behavior in the Mentally Retarded. Lexington, Mass.: Lexington Books, 1972.

Strickland, C. G., and Arrell, V. M. Employment of the mentally retarded. Exceptional Children, 1967, 24, 21-24.

Suran, B. G., and Rizzo, J. V. Special Children: An Integrative Approach. Dallas: Scott, Foresman, 1979.

Tizard, J., and O'Connor, N. The occupational adaptation of high grade mental defectives. Lancet, 1952, 263(2), 620-623.

Touzel, S. W. Secondary learning disabled curricula: A proposed framework. Learning Disability Quarterly, 1978, 1(4), 53-61.

Vance, H. B. Trends in secondary curriculum development. Academic Therapy, 1977,13, 69-78.

Viscardi, H. Speech presented at the President's Committee on Employment of the Handicapped annual meeting, Washington, D.C., April 29, 1975. In D. E. Brolin, Vocational Preparation of Persons With Handicaps. 2nd ed. Columbus: Charles E. Merrill Publishing Co., 1982.

Webster's New World Dictionary of the American Language. 2nd college ed. Cleveland, Ohio: Williams Collins & World Publishing Company, 1976.

Wehman, P. Vocational training of the severely retarded: Expectations and potential. In D. C. Faran, P. Wehman, A. Renzaglia, and R. Schultz, Habilitation Practices With the Severely Developmentally Disabled. Vol. 1. Madison, Wis.: University of Wisconsin, 1976.

Weiderholt, J. L., and McNutt, G. Assessment and instructional planning: A conceptual framework. In D. Cullsman and M. H. Epstein (Eds.), Special Education for Adolescents: Issues and Perspectives. Columbus: Charles E. Merrill, 1979.

Weisenstein, G. Vocational education for exceptional persons: Have educators let it drop through a crack in their services and continuum? Thresholds in Secondary Education, 1976, 1, 29-32.

Zimmerman, W. Follow-up study of educable mentally retarded students in a work-study program. Unpublished paper, 1975.

County of Summit

BOARD OF MENTAL RETARDATION AND DEVELOPMENTAL DISABILITIES

140 E. MARKET ST., AKRON, OH 44308 PHONE: 762-5111

KENNETH SWEENEY
Superintendent

November 17, 1982

Professor Patricia Nelson
Department of Special Education
University of Tulsa
1227 S. Louisville
Tulsa, Oklahoma 74112

Dear Prof. Nelson:

In response to your phone inquiry of November 15, 1982, I affirm the permission I conveyed to you for use of the Ohio Work Values Inventory (OWVI) in the doctoral dissertation you described.

Of course, no alteration or subrogation of the copyright held by the OWVI authors is to be inferred or suggested by this authorization. Any reference made to the contents of the OWVI booklet and manual remains a proper subject of attribution.

Co-author Loyde W. Hales and I are pleased to have you incorporate the OWVI in a doctoral level study. Good luck.

Sincerely,

Bradford J. Fenner

Bradford J. Fenner, Ph.D.

BF/el

CTB/McGraw-Hill

Del Monte Research Park
Monterey, California 93940
Telephone 408/649-8400

12 November 1982

Patricia R. Nelson
Mary K. Chapman Center
University of Tulsa
600 South College Ave.
Tulsa, Oklahoma 74104

Dear Ms. Nelson:

CTB/McGraw-Hill is pleased to grant you permission to use the Social and Prevocational Information Battery in your dissertation research. Should it be necessary to include the test in your dissertation we shall grant permission for one copy to be bound with your personal copy and one copy with your dissertation chairman's copy. Please let usknow at the appropriate time.

The Ohio Work Value Inventory is a product distributed by our Publishers Test Service and we do not have any rights therein to this instrument.

Please contact: Dr. Bradford Fenner
275 N. Revere Road
Akron, Ohio 44313
(216) 867-0907

PHONE call: 11/15/82
O.K. Will send

If we may be of further assistance, please let us know.

Sincerely yours,

Phyllis O'Donovan

Phyllis O'Donovan, Editor
Copyrights and Permissions

2

VITA

Patricia Ruth Nelson

Candidate for the Degree of

Doctor of Education

Thesis: AN EVALUATION OF A UNIVERSITY BASED SUMMER CAREER EXPERIENTIAL AND EXPLORATION PROGRAM FOR MILDLY HANDICAPPED ADOLESCENTS

Major Field: Occupational and Adult Education

Biographical:

Personal Data: Born in Tulsa, Oklahoma, August 19, 1925, the daughter of Elmer and Ruth Cline.

Education: Graduated from Will Rogers High School, Tulsa, Oklahoma, in May, 1943; received the Bachelor of Arts in Education degree from Northeastern Oklahoma State University, Tahlequah, Oklahoma, in 1972; received the Master of Arts degree from the University of Tulsa, Tulsa, Oklahoma, in 1975; completed requirements for the Doctor of Education at Oklahoma State University in May, 1983.

Professional Experience: Teacher for Sunnyside School, Children's Medical Center, Tulsa, Oklahoma, 1964-1968; Program Coordinator for Home of Hope, Inc., Vinita, Oklahoma, 1968-1969; Special Education Teacher-Coordinator and Department Chairperson, Will Rogers High School, Tulsa, Oklahoma, 1972-1978; Adjunct Instructor, Division of Communicative Disorders and Special Education, the University of Tulsa, Tulsa, Oklahoma, 1977-1978; Clinical Instructor, College of Education, the University of Tulsa, Tulsa, Oklahoma, 1978-present.

Professional Memberships: American Association on Mental Deficiency; American Association on Mental Deficiency, Division of Education; Council for Exceptional Children; Council for Exceptional Children, Division of Mental Retardation & Career Development; Phi Delta Kappa; Delta Kappa Gamma; Tulsa Association for Retarded; Association for Children With Learning Disabilities.