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ABSTRACT

This document is a monograph in a personnel development series addressing issues that are pertinent for policy-making personnel concerned with personnel preparation for moderately and severely handicapped populations in the area of vocational preparation. The discussion is divided into three major sections. Section 1 addresses the state of the art in personnel development and includes definitions of terms; information on personnel training programs; personnel certification; research in personnel preparation; current problems, issues, and trends in personnel preparation; and personnel needs. Section 2 provides a series of suggested program guidelines for personnel development with program details for planning and operating preservice and inservice programs. In section 3 five programs are described that have been identified as exemplary in preparing personnel to serve the severely handicapped. Appendixes include performance procedure and professional behavior standards checklists and an annotated listing of suggested readings. (YLB)

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Vocational Education for the Handicapped: Perspectives on Special Populations/ Severely and Moderately Handicapped

Personnel Development Series: Document 2

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FOREWORD

Over the past decade the problems and difficulties that face handicapped youth in their efforts to obtain and maintain employment have been widely documented by researchers, public policy analysts, and advocacy organizations. In the 1970s the U.S. Congress enacted several pieces of education, training, and employment legislation to focus, in part, on resolving these problems. The Education for All Handicapped Children Act of 1975, along with the Vocational Education Amendments of 1976, the Comprehensive Employment and Training Act of 1978, and several civil rights initiatives, placed priority upon assuring that handicapped youth receive appropriate vocational education programs and services. These various pieces of legislation acknowledged the concurrent need for staff development and teacher education programs to assure that effective programs and services are delivered. Within the vocational education, special education, rehabilitation, and CETA systems there are nearly a million professionals--the vast majority of whom have limited or no expertise in planning and providing comprehensive vocational programs and services for disabled youth and adults. The need for training programs to update teachers, support personnel, counselors, coordinators, and administrators is great. There is also an enormous need for training other individuals (such as employers, parents, advocates, co-workers, non-disabled peers) if youths with special needs are to be successful in their transition from school to work.

Planning and conducting effective personnel development programs that serve the career development needs of handicapped youth involves a variety of complex tasks. Developing appropriate interagency, collaborative training arrangements is essential to insure that current knowledge and expertise is utilized from the fields of vocational education, special education, rehabilitation, career development, and employment and training. Decisions must be made relative to the specific training needs of the target audience. Frequently, the needs of inservice practitioners must be considered along with the needs of trainees who are preparing to enter the field for the first time. The question of student needs is also present. The process of providing vocational education for severely handicapped youths is, by nature of the students served and the training technology, considerably different from training mildly handicapped youth. Other critical dimensions related to the content of personnel development encompass such areas as: vocational assessment, career guidance, and evaluation of training programs. The need for and patterns of personnel certification in the field of vocational/special education is also a continuing concern for personnel development programs.

During 1980-82 the University of Illinois hosted a series of three conferences which focused upon improving personnel preparation programs in vocational/special education. These conferences were conducted as part of the Leadership Training Institute/Vocational and Special Education, which was supported by a grant from the Division of Personnel Preparation, Special Education Programs, U.S. Department of Education. As individuals responsible for personnel preparation programs in vocational/ special education met and shared their experiences and concerns, a clear need emerged for a series of monographs on designing, implementing, and evaluating personnel development programs. The need to address the critical questions and identify effective policies and practices related to personnel development was obvious following the initial conference held in Champaign, Illinois in April 1980. The project staff used a small advisory group of individuals attending the conferences to outline the Perspectives monograph series. Needs assessment data collected during and prior to the first conference was used by the group in identifying the major topics to be addressed in the series. Staff involved in the vocational/career education projects funded by the Division of Personnel Preparation were then invited to become members of the various monograph writing teams. Under the expert guidance of Dr. Janet Treichel, LTI Training and Dissemination Coordinator, the writing teams formulated their monographs to focus on such core components as: present state-of-the-art, effective policies and practices, and guidelines for personnel development programs. Dr. Treichel coordinated the planning and preparation of the series in a highly exemplary manner. Her leadership, commitment to excellence, and professional insight were valuable assets in editing this series.

The monograph topics in the Perspectives on Personnel Development series include: Special Populations/Severely and Moderately Handicapped, Certification, Program Evaluation, Effective Interagency/Interdepartmental Coordination, Inservice Personnel Development, Vocational Assessment, Preservice Personnel Preparation, and Career Development/Guidance.

We anticipate that the monographs will be useful resource documents for a variety of audiences. Teacher educators and administrators in higher education will find the series helpful in planning both preservice and inservice programs for special educators, vocational educators, counselors, educational administrators, rehabilitation specialists, and others. State education agencies involved in certification, personnel development, and program administration will find strategies, and suggestions for reviewing, evaluating, and formulating teacher training efforts in local agencies and universities. The monographs are also a rich source of ideas for parent and advocacy groups and professional associations as they seek to improve the knowledge and competence of personnel serving handicapped youth.

This series represents a significant compilation of important and timely perspectives on personnel development in vocational/special education. It contains the wisdom and insight of nearly 50 leaders in the field. We feel it will be a valuable and important resource in improving the "appropriateness" of the programs and services received by the handicapped youths of our nation.

L. Allen Phelps	George Hagerty
Director	Project Officer
Leadership Training Institute/	Division of Personnel Preparation
Vocational and Special Education	U.S. Department of Education

PREFACE

The Perspectives on Personnel Development series has become a reality due to the efforts of a number of individuals. These people were highly instrumental in the development, planning, and publication phases of the monographs.

Appreciation and gratitude is extended posthumously to Margaret (Meg) Hensel. Meg was actively involved in assisting in planning for the personnel preparation conferences and the initial developmental stages for this series. We will continue to miss her enthusiasm and dedicated efforts.

The LTI is indebted to Drs. Allen Mori, University of Nevada, Las Vegas; Frank Rusch, University of Illinois at Urbana-Champaign; and George Fair, University of Texas, for their excellent work in development of this monograph. This document addresses a number of issues that are pertinent for policy-making personnel concerned with personnel preparation for moderately and severely handicapped populations.

The reviewers for the Perspectives series also made important and significant contributions. Dr. Gary Clark of the University of Kansas reviewed each monograph in the series. Dr. Paul Wehman of Virginia Commonwealth University and Dr. Paul Bates of Southern Illinois University--Carbondale served as reviewers for the Perspectives on Special Populations/Severely and Moderately Handicapped monograph. Their insightful comments and suggestions were very helpful in the preparation of the monograph.

Sincere appreciation is expressed to Ms. Alicia Bollman, Ms. Nancy Verbout, and Ms. June Chambliss for their dedicated efforts and patience in providing the secretarial expertise necessary to produce this volume.

Janet Treichel, Editor
Coordinator, Training and Dissemination
Leadership Training Institute/
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Contents

Page

INTRODUCTION 1

STATE OF THE ART 3

Who Are the Moderately/Severely Handicapped 3
Personnel Training Programs 4
Personnel Certification 6
Research in Personnel Preparation 7
Current Problems, Issues, and Trends 10
Personnel Needs 18

SUGGESTED GUIDELINES 22

Preservice Training 22
Role of the Vocational Educator 24
Performance Criteria 26
Practicum Performance 37
Performance and Professional Behavior-Standards Checklist Procedure 42
Procedures for Meeting Criteria Other Than in University Course Work 43
Short Course Outline 45

IDENTIFICATION OF PRACTICES 54

Survey Description 54
Program Descriptions 55
Criteria for Program Inclusion 57
Summary 58

SUMMARY 59

REFERENCES 61

APPENDICES 65

Appendix A. Performance Procedure Checklist 66
Appendix B. Professional Behavior Standards Checklist 80
Appendix C. Suggested Readings 83
Appendix D. Letter of Transmittal 89
Appendix E. Survey Form 91

In November 1975, President Gerald R. Ford signed into law the most comprehensive piece of legislation affecting the education of handicapped individuals ever passed by the Congress of the United States. The legislation, Public Law 94-142, the Education for All Handicapped Children Act of 1975, embodied important moral and legal principles established by many years of litigation and action by the courts and various state legislatures. The one major purpose of the law was to assure that

> all handicapped children have available...a free appropriate public education which emphasized special education and related services designed to meet their unique needs...

A companion piece of legislation, Public Law 93-112, the Vocational Rehabilitation Act of 1973 (regulations for this act did not become available until 1977) Section 504 noted that

> No otherwise qualified handicapped individual in the United States shall, solely by reason of his handicap, he excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance [Rules and Regulations, (Title 45, Subtitle A, Part 84)].

Together these laws created the climate for serving special education's previously excluded population--the "twenty-four hour handicapped child." In a speech presented to the Second Annual Meeting of the American Association for the Education of the Severely/Profoundly Handicapped (1975), Sontag noted that the principle of zero exclusion was rhetoric no longer. In fact, he noted, "that as a field we...[are]...going to have to respond to the severely and profoundly handicapped. There can be no delaying, no excuses, no fourth-down punts."

With the initial confusion and unpreparedness for meeting the unique and diverse needs of this population somewhat behind us, we must begin to answer the crucial question of what are we preparing the moderately and severely handicapped person to do. Bellamy and Wilcox (1980) have noted that secondary education for severely handicapped students has now emerged as a national priority. In fact, Flexer and Martin (1978) have suggested that the emphasis should be vocational skill acquisition since the studies of Crosson (1969), Gold and Barclay (1973), Gold (1972), and Levy, Pomerantz, and Gold (1977) provide us with ample evidence that severely retarded persons can be taught complex visual discrimination and assembly tasks.

As the field of special education presses forward into the decade of the 1980s, there will be increased pressure to maximize the integration of the severely handicapped into the mainstream of society. Thus, some form of remunerative work will be essential if a person is to become better integrated into our society--a society which places a high value on the work ethic and working persons.

The purpose of this monograph is to present perspectives on personnel development for moderately and severely handicapped populations in the area of vocational preparation. The discussion has been divided into three major sections. Section one addresses the state-of-the-art in personnel development and includes definitions of terms, information on personnel training programs, current problems, issues, and trends. Section two provides a series of suggested program guidelines for personnel development with program details for planning and operating preservice and inservice programs. Section three describes some appropriate practices and presents several exemplary programs. The summary suggests implications for future research.

It is hoped that the readers of this monograph will treat the document not as the definitive work in this emergent field, but rather as a reference and a point of departure for further research into the practice of preparing professionals to work with the moderately and severely handicapped.

State of the Art

Who Are the Moderately/Severely Handicapped?

Prior to any discussion of personnel development in vocational preparation for the moderately and severely handicapped, it is essential to define terms for a common frame of reference. Sontag, Smith, and Sailor (1977) maintained that children who were severely or profoundly handicapped were divergent in degree of handicap, not in kind. The authors argued that the population is an extremely heterogeneous group comprising not only the organically impaired, but those whose serious emotional disturbance, deafness, blindness, or severe orthopedic handicaps causes them to be functionally retarded. In an earlier article, Sontag, Burke, and York (1973) noted that the severely handicapped, as a group, have problems that could be categorized as more pervasive, more intense, and more expensive to solve than less handicapped persons. These authors described the population of severely and profoundly handicapped persons as those (Sontag et al., 1973)

> who are not toilet trained; aggress toward others; do not attend to even the most pronounced social stimuli; self mutilate; ruminate; self stimulate; do not walk, speak, hear, or see; manifest durable and intense temper tantrums; are not under even the rudimentary forms of verbal control; do not imitate; manifest minimally controlled seizures; and/or have extremely brittle medical existences. (p. 21)

The United States Office of Special Education's definition of severely handicapped employs the central themes of the Sontag et al. (1973) definition. This definition views the severely handicapped child as one who

> 1) may possess severe language and/or perceptual-cognitive deprivations, and evidence abnormal behaviors such as: (i) failure to respond to pronounced social stimuli, (ii) self mutilation, (iii) self stimulation, (iv) manifestation of intense and prolonged temper tantrums, and (v) absence of rudimentary forms of verbal control; and (2) may also have extremely fragile physiological conditions. (Federal Register, Vol. 40, No. 35, 1975, p. 7412)

It has become generally recognized among the professional community that all persons categorized as severely, profoundly, or multiply handicapped can, for ease of communication, be classified as severely handicapped. In fact, DuBose (1978) suggests that such classification could lead to the inclusion of:

> (1) all moderately, severely, and profoundly mentally retarded individuals; (2) all severely and profoundly emotionally disturbed persons; and (3) all moderately to profoundly retarded or disturbed individuals who have at least one additional impairment (i.e., deafness, blindness, crippling condition). (p. 6)

In an attempt to treat personnel preparation issues for this population, the range of handicapped persons described by DuBose (1978) will be considered in this monograph. In doing so, it is trusted that readers will recognize the vast range of human capabilities and heterogeneity encompassed in the group in terms of functional behaviors.

Personnel Training Programs

In 1972, immediately after the Pennsylvania right to education consent decree, there were few personnel preparation programs for severely handicapped populations operating in the United States. Sontag et al. (1973) argued that there was a direct relationship between the level of a student's disability and the competencies required by the teacher: The greater the child's level of disability, the more precise and specific are the teacher competencies required to affect the child's learning. Despite this early warning, the literature is replete with statements suggesting that our present teacher training programs do not adequately prepare teachers to work with the severely handicapped (Stainback, Stainback, & Maurer, 1976; Snell, Thompson & Taylor, 1979; Grosenick & Huntze, 1980; and Van Etten, Arkell, & Van Etten, 1980). Frequently, teacher training programs make no systematic effort to train preservice teachers of the severely handicapped differentially.

Most programs emphasize the elementary aged child with mild to moderate problems (Grosenick & Huntze, 1980). In a study of needs in the area of the behavioral disordered, Grosenick and Huntze (1980) suggest that "in general students leave training programs unprepared to deal with more severely behavior disordered students" (p. 49).

Even now we find evidence of the crucial need for better trained personnel to work with the severely handicapped (Van Etton, et al., 1980). Wehman (1979) argued that the educational needs of the more severely handicapped can be met only by teacher training programs specially designed for dealing with this population. The author noted three reasons: a) the dramatic difference in curriculum content for this population; b) the need for more powerful instructional procedures to affect positive behavioral changes; and c) the need to deliver follow-up programs into the home.

Sontag, Certo, and Button (1979) commented that personnel training for the severely handicapped is more pronounced with recent developments placing a greater responsibility on and creating an expanded role for teaching personnel. Sontag et al. (1979) cited the earlier Stainback et al. (1976) article and supported their suggestion for "rigorously trained special education teachers" to work with the severely handicapped.

While much emphasis has been placed upon the preservice needs of teachers of the severely handicapped, there has been little written about the need for further inservice training of teachers. In fact, as Snell et al. (1979) noted, the inservice education needs of teachers working with the severely handicapped are virtually neglected. The same authors stated that when inservice education is provided, it is frequently irrelevant to the most pressing needs of teaching personnel. Grosenick and Huntze (1980) reported that there was virtually no inservice teacher education conducted specifically for severely behavior disordered children and youth.

Personnel Certification

As the body of literature on personnel training needs and teacher competencies grows, certification of personnel to work with the severely handicapped remains a perplexing and complex issue. Most states make no distinction on certification to teach the severely handicapped. In fact, most states do not "break out" data on certification of teachers of the behaviorally disordered according to severity since one certification is used for all teachers of behavioral disordered children (Grosenick & Huntze, 1980). The certification problem with regard to the moderately and severely retarded is only slightly better with seven states reporting certification for the trainable mentally retarded (TMR) and three states claiming certification for the severely retarded or severely multiply handicapped (Gilmore & Argyros, 1977). States reporting certification for the TMR were:

1. Kansas
2. Maine
3. Kentucky
4. Missouri
5. Wyoming
6. Minnesota
7. South Carolina

Among those states claiming certification for the severely mentally retarded were California and Missouri with Hawaii offering special certification for the severely multiply handicapped (Gilmore & Argyros, 1977).

It would appear from this brief review of the literature that several summary points could be made regarding personnel preparation:

1. The disparate needs of the population of severely handicapped dictate a well-trained professional whose teacher training program is

specifically designed to prepare teachers to accommodate the needs of the severely handicapped population;

2. Current personnel preparation programs frequently focus upon the needs of mild to moderately handicapped elementary aged children with little emphasis upon the needs of older, more severely involved individuals;
3. Many teacher trainers (professors) are ill-prepared to instruct teachers to work with the more severely involved (Stainback et al., 1976);
4. Schools have employed and will continue to employ minimally trained personnel (Snell et al., 1979);
5. There is a need to expand the existing knowledge base and create empirical evidence to give direction to the types and levels of training needed to adequately prepare personnel to effectively work with the severely handicapped (Burton & Hirshoren, 1979);
6. Teachers who need to receive inservice are frequently neglected in terms of upgrading skills with a concomitant problem that the inservice conducted is often irrelevant (Snell et al., 1979); and
7. States must become involved in serious self-study, and collaborate with college and university personnel preparation programs, develop consistent, meaningful certification requirements for teachers of the severely handicapped.

Research in Personnel Preparation

As we enter the decade of the 1980s, competency based teacher training programs in the United States are pervasive in special education. Thurman and Hare (1979) noted that the basis upon which teacher competencies are derived and eventually selected is rarely supported by empirical evidence on the behavioral outcomes of children. All too frequently, competencies are chosen because a panel of experts deems them important, not because there is a documentable relationship between the identified skills and the learning process in schools (Thurman & Hare, 1979). This position is strongly endorsed by Bellamy and Wilcox (1980) who suggest that teachers of severely handicapped adolescents enter classrooms with little help from research and demonstration efforts.

Few studies have been conducted regarding competencies of teachers of the severely handicapped. Fredericks, Anderson, Baldwin, Grove, Moore, Moore, and Beaird (1978) conducted a study designed to identify competency indicators in teachers of the severely handicapped. The authors found that two indicators accounted for the major differences between teachers whose students made high gains and teachers whose children made low gains. The two indicators identified by Fredericks et al. (1978) were the number of minutes spent instructing and the percentage of task analyzed programs. Together the variables accounted for 78 percent of the variance between the two groups. The most important competency indicator, the number of minutes of instruction per day, accounted for 65 percent of the variance (Fredericks et al., 1978). Thus, an apparently obvious fact distinguishes more effective from less effective teachers--more effective teachers spend significantly longer periods of time per day (and ultimately per week/per year) directly instructing their students. The increased instructional time has the effect of creating greater learning gains among severely handicapped students.

In a follow-up to this study, Fredericks, Anderson, and Baldwin (1979) attempted to identify potential competencies of teachers of the severely handicapped, demonstrate that the identified competencies could be taught to a group of teachers, and prove that teachers trained in these competencies could effect changes in child performance. As in their previous study (Fredericks et al., 1978), the amount of time spent in instruction and the percentage of programs that were task analyzed were the major contributors to differences between the high-gain group and the low-gain group. A third indicator that was considered critical by the authors was the teacher's ability to appropriately provide feedback. The authors strongly suggested that:

> teachers must learn to orchestrate the environment to maximize teaching time. To accomplish this orchestration requires the ultimate in organizational skills. Thus teacher-training institutions must train students in total systems, as opposed to parts of systems: (p. 93)

McCormick, Cooper, and Goldman (1979) conducted a study to determine if teachers could be taught to increase their instructional time with pupils. These authors argued that teacher training programs devote considerable time to assisting trainees to develop assessment, instruction, and management skills with organizational (including how to maximize instructional time) skills left for teachers to work out to the best of their ability. They suggested that their instructional model for teachers resulted directly in increases in the amount of time teachers spent instructing their students.

While one should be cautious in generalizing from the results of an extremely small number of studies conducted in competency identification, it does appear that organizational skills play a significant role in maximizing learning for severely handicapped pupils. More specifically, the more time the teacher spends actually teaching children (as opposed to other responsibilities of running the classroom) the greater will be the observable changes in performance. However, since organizational skills must be taught to preservice teachers, teacher training programs may wish to re-examine their competency priorities to include this critical skill.

Current Problems, Issues, and Trends

Any attempt to separate problems, issues, and trends in personnel preparation for the severely handicapped would be arbitrary, at best, and certainly artificial, given the dynamic state of the field today. Problems and issus consistently overlap and often evolve into trends in training. To present this section, the initial narrative will address problems/issues and the final section will provide insights into trends in personnel development for the next several years.

In the mid-1970s, there was an almost total absence of information in the literature which reflected the apparent vocational potential of severely handicapped persons. As a result, occupational opportunities for the severely handicapped were not widely provided (Bellamy, Peterson, & Close, 1975). At the same time, the early work of Gold (1974) and others was indicating that the difficulty of the work performed and the productivity levels of the severely retarded were increasing dramatically. Gold (1976) later argued that the degree of disability or the presence of multiple disabilities would be extremely poor predictors of a severely handicapped individual's ability to acquire complex vocational tasks.

There were many problems and issues surrounding the vocational potential and vocational expectations for the population, the type of vocational training and placement to be provided for the severely handicapped, and, most significantly, the training needed by personnel to provide vocational training to this population. Horner and Bellamy (1978) suggested that as prevocational workshops and public school programs for severely handicapped persons became more involved with the teaching of complex vocational tasks, there would be an increasing need to identify the concepts and operations that would cut across a wide range of vocational settings. In implementing this training with severely handicapped persons, relevant skills must be identified along with teaching procedures to maximize the severely handicapped person's use of the skills. As Horner and Bellamy (1978) noted, the major problem facing programmers would be defining concepts and operations relevant to vocational performance, sequencing these to identify the long-term instructional objectives, and designing specific instructional materials to teach each concept and operation.

Faced with pressing problems in skill identification, personnel involved with the vocational preparation of severely handicapped persons must be cognizant of the controversial issue involving eventual vocational placement of severely handicapped individuals. Gold and Pomerantz (1978) noted that most individuals labeled as moderately, severely, or profoundly retarded work in sheltered employment settings, if they work at all. Sheltered placement routinely occurs for the severely handicapped despite the fact that the tasks performed there are generally simplistic, not important in industry, and virtually nonremunerative (Gold, 1973). Thus, few severely handicapped persons are really involved in true vocational activity (Gold & Pomerantz, 1978).

If personnel are to acquire the appropriate competencies to develop more sophisticated vocational skills in the severely handicapped, it will be necessary to define the competencies required. As suggested earlier in this monograph, such competency identification is problematic at best. Teachers of the severely handicapped are frequently called upon to learn teacher/child interactions that may be totally different from anything they have ever done before (Sailor & Haring, 1977).

There have been many attempts to identify training competencies for personnel who teach the severely handicapped (Stainback et al., 1976; Burke

& Cohen, 1977; Perske & Smith, 1977; Feinberg & Wood, 1978; Fredericks et al., 1978; Fredericks et al., 1979; McCormick et al., 1979; and Weissman-Frisch, Crowell, & Inman, 1980). A brief review of these competencies is provided for comparison purposes.

Stainback et al. (1976) identified seven training areas for personnel who work with severely handicapped persons. Competencies were suggested in the areas of: (a) diagnostic evaluation, (b) curriculum, (c) methods of teaching, (d) interdisciplinary teamwork, (e) field experience (direct hands-on contact with severely handicapped persons), (f) parent training, and (g) prosthetic aids.

The issue of interdisciplinary teamwork is especially critical to personnel working with the severely handicapped. Hart (1977) describes this approach as one in which the team members independently evaluate the child according to their expertise, but discuss the findings collectively. A group decision is made regarding programmatic recommendations for the child. Each team member provides input for total programming by group consensus. In the area of vocational preparation of the severely handicapped, it is essential for special educators, vocational educators, and vocational rehabilitation personnel to work cooperatively and in an interdisciplinary fashion.

Once severely retarded young adults leave the formal school setting, efforts are usually made to place them in an appropriate job (either sheltered or competitive) setting. Frequently, the services of a trained vocational rehabilitation counselor are necessary for appropriate and continuing services to be provided. While local rehabilitation service agencies are under a federal mandate to serve the more severely handicapped, most rehabilitation counselors have been reluctant to serve the severely handicapped since most counselors are not trained to provide service to this population (Van Etten et al., 1980).

There is little information to suggest that numerous special courses must be designed to facilitate the acquisition of the competencies needed by rehabilitation counselors to work with the severely handicapped. Certainly the content of current rehabilitation course sequences could be redesigned to infuse concepts regarding the various needs of severely handicapped persons. The section on Suggested Guidelines in this monograph provides suggestions about the nature of content that will need to be infused into existing content in rehabilitation counselor training programs.

Burke and Cohen (1977) identified 19 primary competency areas with some 50 sub-elements. Included among their list were areas such as: (a) classroom organization; (b) prosthetic strategies; (c) applied behavior analysis; (d) curriculum development (including objectives, task analysis, etc.); and (e) curriculum units (including one of vocational education).

Much has been written regarding the competencies needed by vocational educators to work effectively with the mildly handicapped. Hull and Halloran (1974) developed a preservice and inservice program to prepare vocational and practical arts education teachers of the educable mentally retarded. Albright, Nichols, and Pinchak (1975) identified 112 competencies necessary for vocational teachers of the handicapped and disadvantaged in Ohio. Albright and Clark (1976) developed a monograph entitled Preparing Vocational and Special Education Personnel to Work With Special Needs Students which included guidelines, strategies, and resources needed for training programs. (See also Kruppa, Hirtz & Thrower, 1973; Bitter, 1971; Brolin & Thomas, 1972; Clark & Oliverson, 1973; Nielson, Johnson & Frank, 1975).

Andreyka, Blank and Clark (1976) reported the development of a competency-based vocational teacher education program in Florida. Competencies in nine areas were identified by panel members: (a) program planning, (b) instructional planning and teaching methods, (c) evaluation, (d) management, (e) guidance, (f) school-community relations, (g) student organizations, (h) professional role, and (i) unique competencies.

Brock (1977) suggested that two or three special emphasis courses would be necessary and sufficient to insure that vocational teachers work successfully with the special needs student. It is implied that vocational special needs concepts will be infused into vocational education and special education course content. Brock (1977) and Phelps, Evans, Abbas and Frison (1976) described various methods of infusing vocational special needs content including: (a) team teaching, (b) guest lectures, (c) use of modules, (d) requiring students to enroll in courses in both areas, and (e) the development of interdisciplinary courses.

Unfortunately there is a scarcity of literature regarding the preparation of vocational educators to work with the severely handicapped. An article by Perske and Smith (1977) is one of few that addresses this issue.

Personnel who work with severely handicapped persons in this area need basic information on vocational education as well as an ability to identify and teach important prevocational skills. Job placements must be identified and analyzed to ensure that clients can maintain employment even in our rapidly changing technological society. Included among the identified skills were (Perske & Smith, 1977).

1. Understanding jobs and work settings;
2. Training severely handicapped clients to adapt to the social environment of a work setting in terms of fellow workers, supervisors, and other special contingencies;
3. Training students in basic job skills and prerequisites including physical/sensory motor skills, language, machine/tool skills, hygiene, etc.; and

4. Training students in supportive skills such as transportation, time telling, and money management.

Considerable overlap in competency identification is evident to the reader of Feinberg and Wood (1978), Fredericks et al. (1979 & 1979); and McCormick et al. (1979). In these articles, organizing and maximizing instructional time and task analysis were identified as the most crucial competencies to be developed.

Mori and Masters (1980) also identified skill areas to be developed for severely retarded persons in occupational training programs. If these areas were viewed as competencies needed by teaching personnel, one would find that training must occur in areas such as mobility, recreation and leisure time usage, and work adjustment.

The provision of meaningful and appropriate inservice education to practicing professionals remains both an issue and a problem. It was noted earlier that much of the inservice provided is irrelevant to the needs of the practicing professional (Snell et al., 1979). At least two successful inservice training programs are described in recent literature on the subject (Snell et al., 1979; Weissman-Frisch et al., 1980).

Snell et al. (1979) described the active response inservice training model (ARITM) as a means to overcome the irrelevance of much of the inservice provided to teachers of the severely handicapped. The cycle, which uses a one-to-one teacher-consultant ratio, employs six steps (Snell et al., 1979):

1. Problem identification and assessment of needs;
2. Assessment of targeted students' skills;
3. Joint planning of an intervention program;
4. Consultant demonstration of classroom procedures;

5. Teacher imitation of procedure with feedback from consultant; and
6. Monitoring of effect of intervention over time.

Weissman-Frisch et al. (1980) describe an inservice program for vocational trainers focusing on training, task analysis, and product supervision. They suggested inservice programs should consider using a multiple perspective evaluation approach; servicing only a few participants at each seminar; incorporating a combination of didactic, discussion, modeling, simulation, "hands-on," feedback, and reinforcement training models; and use a competency based training approach.

Some identifiable trends are clearly emerging in personnel preparation for the severely handicapped. Perhaps foremost among the trends is a strong call for upgraded vocational opportunities for severely handicapped persons. Gold and Pomerantz (1978) have argued that personnel involved in vocational programming must upgrade and expand the severely retarded person's opportunities in the work world. If sheltered employment is used, students must be trained to perform at higher levels in more remunerative work (Gold & Pomerantz, 1978). Mori and Masters (1980) strongly support this notion and call for industrialized sheltered employment for the severely handicapped. Their concept of an industrialized shop is one which mirrors the demands of competitive employment in the expectations for and remuneration provided to severely handicapped workers.

Other training trends have been identified by Van Etten et al. (1980). They suggest that future training programs will include comprehensive and extensive work in speech and language development, sensorimotor development, and much greater concentration on normal childhood physical, social, and emotional development. It is also noted that the teacher role for severely handicapped persons will evolve in a fashion that will require the teacher to be an educator of children as adults, parents, and professionals. Differential intervention placements for severely handicapped persons will require personnel to be trained to function as members of an interdisciplinary team. Personnel training will probably include a greater portion of training in departments of medicine, physical and occupational therapy, counseling, communication disorders, and early childhood education. The greater breadth and depth of training of professionals to work with the severely handicapped will also require multiple practicum experiences rather than traditional single classroom assignments (Van Etten et al., 1980).

To summarize the major points considered as issues or trends, the following statements may be made:

1. Research would support the notion that the vocational potential and productivity of the severely handicapped can be increased dramatically by individual manipulations.
2. Commensurate with this rise in ability is a rise in the expectations of professionals who work with this population.
3. While there has been some controversy regarding the derivation of personnel competencies, there is also a good measure of agreement about what skills teaching personnel need to develop including classroom organization, increased instructional time, curriculum development, and task analysis.
4. Inservice education response systems must be highly relevant and based upon the individual needs of practicing professionals.
5. Inservice education should focus upon the acquisition of specific skills and should be taught with varying methodologies in individual or small group sessions.

6. Settings providing vocational training opportunities for the severely handicapped must be upgraded to become more competitively oriented and remunerative for the worker.
7. Trends include the expansion of personnel training into areas beyond pure "education" or teaching methodology.

Personnel Needs

Previous sections of this paper have documented the abundant literature, calling for specially trained teachers to meet the needs of severely handicapped persons. However, a review of the literature failed to uncover any studies on motivational factors underlying job acceptance among teachers of the severely handicapped (Marozas and May, 1980). Morozas and May (1980) conducted a study in which they surveyed 274 teachers of the severely and profoundly retarded in Pennsylvania. These teachers were attending the Pennsylvania Training Model (inservice for teachers of the severely/profoundly retarded). The authors found that the two reasons most often stated for choosing careers with the severely retarded were that the job was rewarding and challenging. If the results of this study can be generalized and we look to some of the future trends in personnel development in this area, preparation of personnel must stress the demands (challenges) and diversity of working with severely handicapped persons. Much more research must be conducted on the personal traits of successful teachers (and other personnel as well) of the severely handicapped. A better understanding of these factors could help personnel trainers develop more appropriate training, as well as lead to lower attrition in the field.

Little has been written regarding the qualities of successful teaching personnel for the severely handicapped. Certainly well trained and dedicated people are essential, but successful teachers are also expected to be persons who can respond to challenges and find rewards in small incremental changes in behavior.

Mori and Masters (1980) cited several personal factors they felt were important to developing good employees to work with the severely retarded. Those factors included: (a) the desire to work with and help others, including deriving feelings of self worth from performing work others might find distasteful; (b) a belief that teaching the severely handicapped is just as significant and as important as teaching the mildly handicapped or the nonhandicapped; and (c) emotional stability to ensure that the employee does not overreact to stressful situations, become discouraged, or even become depressed by client regression and/or small increments of improvement.

It is important to examine supply and demand data in this area. Grosenick and Huntze (1980) suggested that teacher shortages for the severely behavior disordered would persist as increased demand coupled with attrition outdistances supply. Their data suggested that shortages for 1978-1979 ranged from one to twelve percent with the most critical shortages in rural areas. The authors predicted that during the period from 1980-1983 the percentage of certified teacher shortage would definitely increase and probably cause many states to employ temporary certificated personnel.

Grosenick and Huntze (1980) evaluated attrition rates for personnel working with special populations. It was their contention that the pervasive shortage in teaching personnel is worsened by high attrition rates in many states. The authors noted that "rural areas experience more attrition than do urban areas, adolescent programs experience more attrition than do elementary programs, and programs for severe behavior disorders experience more attrition than do programs for mild behavior disorders" (p. 44).

During the five year period from 1973-1978 attrition rates were calculated for all areas of personnel in special education. The following results were obtained for areas germane to our discussion of personnel in the area of severely handicapped: (Grosenick & Huntze, 1980, p. 45)

Area of Handicap Served	Attrition Rate 1973-1978
Mentally handicapped (trainable)	46%
Orthopedically handicapped	51%
Severe behavior disorders	53%

A personnel problem clearly exists in the area of severe handicapping conditions when one-half of the labor force leaves their jobs.

However, as Grosenick and Huntze (1980) suggested:

> there is a need to examine...[these]...attrition...[rates]...in comparison...to regular education and to non-education jobs. It must first be determined how much attrition is "normal" and then develop strategies for reducing excess amounts (p. 45).

To briefly summarize the foregoing section the following is proposed:

1. Considerable research needs to be conducted relative to motivational factors underlying job selection in the area of the severely handicapped.
2. Research is needed in the area of personal characteristics of successful and satisfied teachers of the severely handicapped.
3. There will continue to be critical shortages of certified personnel in the area of severely handicapped particulary in rural areas and adolescent programs.
4. Severe attrition rates compound personnel shortage problems creating an need for research into the causes of and remedies for attrition.

The next section will address the topic of suggested guidelines for preparing personnel to work with the severely handicapped. In discussing this issue, a practicum-based program which emphasizes both knowledge and application of skills will be presented.

Suggested Guidelines

Preservice Training

Variations exist among institutions of higher education in efforts to educate students. These variations, however, are not dramatic among institutions offering practicum-based teacher training. Conceptually, practicum-based teacher education relies upon the ability of students to acquire classroom knowledge on the one hand and field-based competencies on the other. Operationally, the marriage between what is learned in the classroom and what is practiced in the field is, usually, the responsibility of field supervisors. This section presents performance criteria intended to serve as a guideline for educating potential teachers. These criteria are divided into two major categories: knowledge and performance. The performance criteria are further divided into performance and professional behavior standards.

The following assumptions provide the framework from which these guidelines were developed:

1. Etiological labels in special education are programmatically of little value and are perhaps detrimental to the development and happiness of those being served.
2. All children and adults can benefit from educational programs. Furthermore, these educational programs should take place in the least restrictive environment feasible and should emphasize the development of academic, social, and vocational competence.

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[1] Much of the material contained herein was developed by George R. Karlan, Frank R. Rusch and students enrolled in the Severe Behavioral Handicaps (SBH) program at the University of Illinois (1978-1980).

3. There exists a direct relationship between the level of the student's disability and the level of instructional competence required by teachers: the more pronounced the disability, the more powerful and precise are the skills needed by the teacher.
4. Both the training program and the necessary competencies needed by a teacher to serve the moderately and severely handicapped student are best defined by the anticipated needs of the students served. For example, teachers should be prepared to toilet train, eliminate self-descriptive and self-stimulatory behaviors, teach imitative responding, develop skills for communication and independent living, and teach occupational skills. Ultimately, the success of the teacher should be evaluated on the basis of the success of the person trained. When the needs demonstrated by moderately and severely handicapped students define the competencies that become the goals of the university teacher-training programs, the handicapped students are, in fact, helping to mold the education of special educators.
5. Since moderately and severely handicapped students are often served by untrained or undertrained teachers and noneducational personnel (e.g., nurses, ward staff), there is a great need for continuing professional training. In response to this need, training programs should be available for the training and retraining of personnel serving the severely/multiply handicapped student; this necessitates making available training programs to students at the graduate level.
6. Teachers of the moderately and severely handicapped student must be prepared to work cooperatively with ancillary school personnel

(e.g., speech therapists, occupational and physical therapists, social workers, rehabilitation counselors).

7. The role of the teacher is exceedingly complex and extends far beyond that of the traditional teacher. While direct instruction remains a major part of teaching the severely handicapped, the job goes well beyond this. To effect substantial changes in the lifestyles of the severely handicapped, teachers must be concerned with (a) promoting the interaction of society with the handicapped student, (b) integrating the range of services available to the moderately and severely handicapped student, (c) modifying physical and educational environments to develop and support learning, and (d) training parents, professional and non-professional personnel to maintain educational gains in all environments.

Because educational services to moderately and severely handicapped students are relatively new, those who acquire the skills necessary to effectively work with the moderately and severely handicapped student are unique. Therefore, graduates of practicum-based teacher training programs should also be prepared to assume leadership roles in teaching, training, and administration in a variety of settings (e.g., private schools, home training programs, sheltered workshops, group homes, residential centers, day care activity centers, local ARCs, state departments of education).

The Role of the Vocational Educator

Moderately and severely handicapped students pose complex problems for teachers desiring to provide quality services. In essence, the interaction between handicapped persons and their environments presents the majority of challenges to be met and surmounted by the vocational educator. The work potential of the severely handicapped student is largely proportionate to the level of technical assistance available to promote learning and necessary vocationally related tasks (i.e., social/vocational survival skills).

The vocational educator must possess both specialized and generalized skills to prepare a total service plan that incorporates the teaching of necessary skills and successful means of interaction between students and services to be provided. Examples of the first include behavior analysis and curriculum design while the latter includes an understanding of general problems of funding and inter-agency cooperation.

From the point of view of the persons most likely to receive the services of graduates from practicum-based teacher training programs, providing opportunities to acquire marketable skills is probably most important. Course work and practicum experiences should closely resemble the exigencies of what is required in various occupations. Thus, the vocational educator is in a unique position to determine what is desired and what exists, striving to make up the difference through quality service planning and delivery.

Quality service planning, an integral part of the individualized education plan, entails outlining areas of concern and needs; prioritizing long-term goals; writing short-term objectives; determining the amount of time the individual will spend in alternative service areas (e.g., evaluation and on-the-job training); specifying person(s) responsible; setting timelines; making placement recommendations; making specific recommendations for procedural implementations; and establishing objective evaluation criteria. It is quality service planning for which the vocational educator should be held responsible upon leaving a practicum-based teacher training program.

Performance Criteria

The goal of practicum-based teacher training programs should be consistent with the primary goal of the Vocational Rehabilitation Act (i.e., to make it maximally possible for handicapped individuals to enter into productive employment when and where possible). Here, productive employment is defined as employment in industry earning a minimum rate or more.

All teacher training programs should be experimental and experiential in their approach. Any set of teaching skills and competencies are, at first, arbitrary and should be subject to continuous evaluation and re-evaluation. The field-based practicum is one source of feedback to address substantive program change. The following list of courses is designated as a framework upon which the performance criteria are based.

1. Behavior Management
2. Measurement
3. Curriculum Programming
4. Medical/Physical Aspects
5. Language
6. Parent and Family Involvement
7. Secondary/Adult Vocational Training
8. Legal Issues/Advocacy

As previously mentioned, course criteria should be divided into two major categories: Knowledge and performance. In the following section performance criteria have been arranged according to each of the course areas listed.

1. Behavior Management

A. Knowledge Areas

(1) The trainee[1] will demonstrate knowledge of each of the following behavior management principles and techniques: (a) positive reinforcement, (b) removing interfering conditions, (c) generalization and maintenance, (d) shaping and fading, (e) chaining, (f) modeling and imitation, and (g) guidance.

(2) Given a student who has acquired a new behavior and needs to maintain the gain, the trainee will demonstrate knowledge of (a) scheduling for intermittent reinforcement, and (b) programming for conditioned reinforcement.

(3) Given a student who exhibits a behavioral excess, the trainee will demonstrate knowledge of the techniques of (a) extinction, (b) time out, (c) response cost, (d) differential reinforcement of other behaviors, (e) satiation, (f) reinforcing imcompatible behaviors, and (g) punishment.

(4) Given data from several behavior management projects, the trainee will demonstrate knowledge of how to evaluate the effectiveness of the intervention(s) employed.

(5) The trainee will demonstrate knowledge of the following: (a) situations where contingency contracts are appropriate and inappropriate; (b) steps in preparing and negotiating contingency contracts, and (c) modifications of contingency contracts based on student performance data.

(6) The trainee will demonstrate knowledge of the following: (a) situations where group contingencies are appropriate and inappropriate; (b) steps in preparing and arranging group contingencies; and (c) modifications of group contingencies based on student performance data.

B. Performance Areas

(1) Given at least five research articles concentrating on behavior management or behavior analysis, the trainee will write a summary of each article to include a description of the following: (a) the target population, target behavior(s), observation and recording procedures, intervention and effectiveness of the technique(s); (b) the replicability, generality, and validity of each study; and (c) the procedures that might be employed/adopted for actual or hypothetical students.

(2) Given a case description, the trainee will develop or modify existing, appropriate behavior observation procedures (e.g., frequency count, interval recording), and operationally define student behaviors.

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[1] Trainee refers to the university student.

(3) Given hypothetical observation data, the trainee will calculate interobserver agreements for five sets of data.

(4) Given hypothetical data from interval and time sampling recording procedures, the trainee will prepare a noncumulative graph to represent the data.

(5) Given hypothetical data from frequency and duration recording procedures, the trainee will prepare both noncumulative and cumulative graphs to represent the data.

(6) The trainee will: (a) identify situations where token systems are appropriate and inappropriate; (b) outline the steps in preparing a token system; (c) prepare a token system for a hypothetical or real problem; (d) develop a measurement procedure for the problem; (e) describe procedures for trouble-shooting a token system; (f) indicate how a token system can be evaluated and modified based on student performance; and (g) describe the steps in phasing out a token system, and replacing it with a contingency system which is more natural in school settings.

2. Measurement

A. Knowledge Areas

(1) Given at least five research articles concentrating on assessment/measurement procedures, the trainee will demonstrate knowledge of the replicability, validity, and generality of each article and the procedures that might be employed or adapted for actual or hypothetical students.

(2) Given specific information on both norm-referenced and criterion-referenced instruments, the trainee will demonstrate knowledge of the major differences and uses of both types of instruments.

(3) Given information on descriptive statistics (mean, median, mode, standard deviation, variance, standard error of measurement, correlation coefficient, and standard scores), the trainee will demonstrate knowledge and use of them.

(4) The trainee will demonstrate knowledge of the differences between and uses of formative and summative evaluation procedures in product/material development.

B. Performance Areas

(1) The trainee will identify a criterion-referenced instrument to evaluate student performance in at least four of the following areas: prerequisite learning behaviors, motor

development, self-help skills, social functioning, language development, reading, math, vocational skills, independent living skills, and community functioning.

(2). Given one of the criterion-referenced instruments identified in Competency 1, the trainee will administer the instrument and prepare a written and graphic summary of the student's performance.

(3) Given formal (norm-referenced) standard assessment devices, the trainee will select a test in at least two of the following areas that is appropriate to severely handicapped students' intellectual functioning, language performance, reading, math, perceptual-motor development, social development, and independence and present a written evaluation of the assessment device including a rationale supporting its use.

(4) Given at least one behavior assessment system (e.g., BCP, TARC, PAC, AAMD Adaptive Behavior Scale), the trainee will present a written evaluation of its use with severely handicapped students. A rationale for or against the use of the system must be included.

(5) Given a hypothetical description of a classroom, the trainee will outline components of a systematic needs assessment to define inservice objectives.

3. Curriculum Programming

A. Knowledge Areas

(1) Given at least three research articles from each of the areas listed below, the trainee will demonstrate knowledge of the replicability, validity and generality of each article and the procedures that might be employed or adapted for actual or hypothetical students. Specific areas include: (a) issues in the delivery of instruction, (b) considerations in the development of curriculum and the delivery of instruction, (c) development of imitation and instructional control, (d) discrimination training, (e) generalization training, (f) task analysis, (g) math skills, (h) self-help and self-care skills, (i) motor development and mobility, (j) social skills and affective development, (k) reading skills, and (l) problem solving and mnemonic strategies.

B. Performance Areas

(1) The trainee will evaluate or develop one criterion-referenced instrument designed to evaluate student performance in each of the following areas: (a) prerequisite learning behaviors, (b) self-help skills, (c) social interaction and affective development, (d) reading, (e) math, (f) discrimination, and (g) problem solving skills.

(2) The trainee will present a written evaluation of curriculum guides intended for use with severely handicapped populations. The evaluations will consider such factors as (a) completeness of curriculum coverage/omissions of important areas, (b) end points of skill sequences articulated, (c) adequacy of behavioral objectives, (d) degree of task analysis and points of breakdown in the analysis, (e) potential for use as both assessment and teaching device, (f) provision of system for gathering baseline, formative, and summative evaluation on student performance, and (g) identification of instructional materials/resources.

(3) Utilizing information obtained for a comprehensive student assessment, the trainee will write an Individualized Education Program (IEP) to include: (a) statement of present levels of educational performance, (b) long-range instructional goals, (c) short-range behavioral objectives, (d) specific educational services to be provided, and (e) appropriate objective criteria and evaluation procedures.

(4) Given a real or hypothetical student with an obvious physical handicap and instructional objectives, the trainee will develop at least one different method to facilitate skill acquisition. These prosthetic strategies could include: further refining of task analysis, prosthetizing the environment, prosthetizing the individual, changing the response requirements of the task, or modifying the instructional materials. Include in the description specific information about nature of student handicap, current level of functioning on the target skill, description of the prosthetic, and outline of how the target individual will be trained to use the prosthetic.

(5) Given information on performance of a group of 8 to 12 students, the availability of space, length of school day, availability of aides/volunteers and schedules for supportive services, the trainee will outline a daily regimen which provides appropriate instruction/training for each student in each area of the curriculum. The regimen must provide (a) activities which can include all members of the group, (b) both individual and small group instruction for each student, (c) accommodations for supportive services where appropriate for groups or individuals, and (d) scheduled activities for each student during each time block.

4. Medical/Physical Aspects

A. Knowledge Areas

(1) Given at least five research articles concentrating on physical/motor development, the trainee will demonstrate
physical/motor development, the trainee will demonstrate
knowledge of the replicability, generality and validity of

each article, and the procedures that might be employed/adapted for actual or hypothetical students.

(2) The trainee will demonstrate knowledge of (a) the characteristics of cerebral palsy according to duration, type, and degree, (b) the causes/etiology of cerebral palsy, and (c) the related deformities and associated handicaps.

(3) The trainee will demonstrate knowledge of (a) the characteristics of epileptic seizures according to type, (b) the causes/etiology of seizures, and (c) the specific management procedures when given a description of various seizure behaviors.

(4) Given hypothetical information on a student with cerebral palsy, the trainee will demonstrate knowledge of the considerations before handling, carrying, lifting, transferring, lowering, and positioning the student, and the reasons for the methods chosen.

(5) Given hypothetical information on a student with cerebral palsy, the trainee will demonstrate knowledge of appropriate feeding techniques, appropriate feeding positions, oral reflexes to be inhibited, and adaptive equipment to facilitate feeding.

(6) Given hypothetical information on a student with cerebral palsy, the trainee will demonstrate knowledge of appropriate dressing techniques, appropriate dressing positions, and clothing modifications.

(7) Given hypothetical information on a student with cerebral palsy, the trainee will demonstrate knowledge of appropriate toileting techniques, appropriate toileting positions, and adaptive equipment to facilitate toileting.

(8) The trainee will demonstrate knowledge of (a) the trade and generic names of the most commonly prescribed anticonvulsant drugs, and the primary purpose and common side reactions of each, and (b) the trade and generic names of the commonly prescribed drugs used for cerebral palsy, and the primary purpose and common side reactions of each.

(9) The trainee will demonstrate knowledge of (a) degenerative diseases (e.g., muscular dystrophy, cystic fibrosis), (b) lower incidence conditions (e.g., spinal bifida, dislocation of hip, scoliosis), (c) sensory handicaps (e.g., visual, auditory), and (d) mental retardation, clinical syndromes (e.g., Down's Syndrome, PKU).

B. Performance Areas

(1) The trainee will evaluate or develop one criterion-referenced instrument designed to evaluate student performance in motor development.

(2) Given a student with cerebral palsy, the trainee will (a) assess the major postural reflexes, (b) describe the physical restrictions that abnormal reflex development has on the student, and (c) list relevant questions to ask of an occupational/physical therapist or physician.

(3) Given a student with cerebral palsy, the trainee will perform each of the following techniques: handling, carrying, lifting, transferring, and lowering.

(4) Given a student with cerebral palsy, the trainee will position the student in the following positions: supine, prone, side-lying, side-sitting, supported sitting, and, when possible, independent sitting. The trainee will employ adaptive/prosthetic equipment to facilitate each position.

(5) The trainee will design and write an instructional program in one of the following areas: feeding, dressing, and toileting.

(6) The trainee will design a procedure for assessing drug effects which is more valid and reliable than traditional methods.

5. Language

A. Knowledge Areas

(1) Given at least five research articles concentrating on language development, the traineee will demonstrate knowledge of the replicability, validity, and generality of each article and procedures that might be employed or adapted for actual or hypothetical students.

(2) The trainee will demonstrate knowledge of semantics and pragmatic language concepts in relation to language programming for severely handicapped students.

B. Performance Areas

(1) The trainee will evaluate or develop one criterion-referenced instrument designed to evaluate student performance in the area of language development.

(2) Given a physically handicapped, nonverbal student, the trainee will design (e.g., display graphically) a communication board or booklet and describe the rationale for the layout and word choice.

(3) The trainee will outline areas that a language curriculum or assessment device should include and provide a rationale for each area included.

(4) Given a minimally verbal or nonverbal student, the trainee will (a) identify and summarize the student's present communication level, conceptual abilities, need for communication in the natural setting, physical ability to communicate, and ability of recipients to use and learn a variety of communication techniques; and (b) write an appropriate communication program for the student.

(5) Given a speech and language therapy report, the trainee will list objectives on which to assess the student in class or other appropriate settings.

(6) Given a speech and language therapy report on a hypothetical or real student, the trainee will list relevant questions to ask of a speech and language therapist.

(7) The trainee will evaluate one communication/language program for each of the following age ranges: (a) preprimary, (b) primary/intermediate, and (c) secondary/vocational.

(8) The trainee will prepare a chart describing the advantages and disadvantages of at least six symbol and/or language systems that might be considered for use with a severely handicapped population (e.g., SEE signs, Signed English, Bliss symbols, Rebus symbols).

(9) The trainee will identify and learn 20 functional signs by referencing The Signed English Dictionary (Bornstein, Hamilton, Saulnier, & Roy, 1975).

6. Parent and Family Involvement

A. Knowledge Areas

(1) Given at least five research articles concentrating on parental involvement, the trainee will demonstrate knowledge of the replicability, validity, and generality of each article, and the procedures that might be employed or adapted for actual use.

B. Performance Areas

(1) The trainee, either individually or with a peer, will plan and conduct a minimum of one hour of inservice training aimed at improving the skills of parents, classroom teachers, aides, or administrators in some area related to services for the severely handicapped. Prior to conducting this workshop, the trainee will submit a planning document which includes: (a) objectives for the training

session, (b) materials/resources to be utilized, (c) agenda, and (d) evaluation plans for the workshop. Following the training, a report will be submitted containing a description of actual workshop implementation, evaluation outcomes, and a summary of how the workshop would be modified in the future.

(2) Individually or in small groups, the trainee will develop a system for reporting to parents/guardians the educational progress of their severely handicapped child. The "report card" must be sufficiently generic that it can be used with a group of students, but must be sufficiently explicit to provide parents with meaningful information regarding their own child's performance. The reporting system should be congruent with IEP areas.

(3) The trainee will present a comprehensive school or program-wide plan for involving parents in the educational system that serves their handicapped children. The plan should be appropriate for a particular functioning level and should be appropriate to a student's chronological age. It should include: (a) identification of points at which parents come in contact with the educational system, (b) delineation of possible roles for parents in the educational system, (c) procedures for monitoring/managing parent involvement, (d) plans for systematic parent training, and (e) identification of necessary resources to support the parent involvement/training activities.

(4) The trainee will work with parents/house parents/guardians of at least one student from the practicum setting. Contact with the parents will take place over a minimum of six one-hour visits and should include the following as appropriate to the particular parents: (a) introduction to data-based instructional model employed in the student's program, (b) communication regarding current level of student competence, (c) training in stating problems behaviorally, (d) training in data-collection and charting using procedures and definitions already in effect, (e) training to complement on-going school based instructional programs in the home, (f) training to employ basic behavior management techniques in the home, and (g) training to establish new instructional programs in the home.

(5) The trainee will individually evaluate a commercially available material designed to assist/train parents to work with their problem/handicapped child using the parent training material evaluation form. The review should address at least the following points: (a) suitability of language level of the text for parents of various backgrounds (e.g., presence of jargon, extensive vocabulary), (b) attitude expressed toward both parent and target

problem(s), (c) overall accuracy of information presented, (d) appropriateness of suggested techniques for parent implementation, (e) detail re: approaches to problem resolution, (f) can the material stand alone without additional supervision, training, general orientation, and (g) specific strong/weak points of the material.

7. Secondary Adult Vocational Training

A. Knowledge Areas

(1) Given at least five research articles concentrating on secondary or adult vocational aspects, the trainee will demonstrate knowledge of the validity, replicability, and generality of each article and the procedures that might be employed or adapted for actual or hypothetical students.

(2) The trainee will demonstrate knowledge of the rationale for prevocational/vocational programming for severely handicapped students in each of the following age groupings: (a) preprimary, (b) primary/intermediate, (c) secondary, and (d) postsecondary.

(3) The trainee will demonstrate knowledge of possible funding agencies and financial sources for secondary adult students (local, state, federal).

(4) The trainee will demonstrate knowledge of work adjustment counseling information (e.g., how to deal with specific instances that may occur when students are receiving on-the-job training).

(5) Given a student who is moving to a new residential or training placement, the trainee will demonstrate knowledge of how to (a) identify personnel in the new setting, (b) meet with persons who will be responsible for supervision and programming in order to identify environmental expectations, and (c) communicate to new personnel those programs/techniques which have been successful.

B. Performance Areas

(1) The trainee will evaluate or develop one criterion-reference instrument to evaluate student performance in each of the following areas: (a) home living skills, (b) community living skills, (c) recreational skills, (d) sex education, (e) vocational skills, and (f) social interactions.

(2) The trainee will present written evaluation of the appropriateness of one formal (norm-referenced) assessment device for use with handicapped students in the area of vocational skill development.

(3) The trainee will develop career counseling (guidance/life planning/eventual setting) information for at least one student. This information will be evaluated, discussed with the teacher, and (if appropriate) presented to the parents.

(4) Given a situation where the trainee is working with a severely handicapped student on a vocational/prevocational task, the trainee will design and write a description of a prosthetic to simplify/aid task completion.

(5) Given case study information on a student who has met all program objectives in the current placement, the trainee will prepare an outline for a staffing to move the individual to a less restrictive program or back into the community. The outline will include: (a) identification of possible placement sites, (b) analysis of demands placed on clients in each site, (c) selection and justification of choice of future placement, (d) copy of written and graphic summative evaluation of client competencies in various curriculum areas, (e) plans for follow-up of present placement, and (f) specific steps to program for the generalization and maintenance of behavior change.

(6) The trainee will meet with and provide information to peers (class or seminar) concerning vocational preparation/vocational technical education programs at colleges in this area, agencies, and technical institutions, and relate this information to possible usefulness for work with severely handicapped students.

(7) The trainee will develop a community program designed to increase knowledge about vocational possibilities for severely handicapped students and present the program to class members.

8. Legal Issues/Advocacy

A. Knowledge Areas

(1) The trainee will demonstrate knowledge of the major components of (a) P.L. 94-142, (b) P.L. 93-112 Section 504, (c) P.L. 94-482, and (d) State Rules and Regulations.

B. Performance Areas

(1) Given a hypothetical situation in a local school district, the trainee will outline a program to implement "right to education" legislation. This program will include procedures to locate severely handicapped citizens (both children and adults) who are not appropriately served, referral forms, listings of cooperating agencies, a plan for news media coverage, and a list of assessment devices and criteria to be employed in evaluating and screening.

(2) Given a legal question concerning the abrogation of a handicapped individual's rights in an educational and vocational placement, the trainee will make a simulated small group presentation on the basis for the legal right and identify more than one course of action which the trainee, as a professional, could take to bring about change.

(3) Given a hypothetical situation where services are not adequate for severely handicapped individuals, the trainee will make a simulated presentation to school or state agency board members arguing for increased services. Arguments must be drawn from a number of different sources (professional literature, litigation, and legislation).

(4) Given a target audience and simulated situation, the trainee will outline a feature length article for a local newspaper, an in-house newsletter of a local social service agency, or an open letter to a local or state legislative body advocating the principles of normalization and suggestions for implementing procedures. Format and content of the article/letter must be appropriate for the target audience and must meet literary standards.

Practicum Performance

As previously indicated, practicum performance criteria are divided into performance and professional behavior standards. Performance criteria and professional behavior criteria are listed below for a sequence of three practicum experiences. Each performance or product should be judged acceptable by a practicum supervisor. Professional behaviors should be judged acceptable by two of the following three persons: trainee (self-evaluation), cooperating teacher, and practicum supervisor. As a guideline, it is recommended that evaluation of professional behaviors be conducted monthly. By the first evaluation, at least 50 percent of the professional behaviors should be judged acceptable. By the final evaluation, all of the professional behaviors should be judged acceptable by each of the judges indicated above.

First Practicum

A. Performance Areas

(1) The trainee will implement instructional programs in each of the following arrangements and will adhere to program specifications: (a) one-to-one instruction, (b) small group instruction (two to three students), (c) large group instruction (four to eight students), and (d) continual behavior management.

(2) The trainee will collect data on instructional programs in each of the following arrangements and will demonstrate at least 90 percent reliability with a second observer: (a) one-to-one instruction, (b) small group instruction (two to three students), (c) large group instruction (four to eight students), and (d) continual behavior management.

(3) Given a group of three or four students, the trainee will deliver an appropriate amount of instruction to each student and will encourage students to learn from other students' task presentations for five instructional sessions.

(4) Self-improvement. The trainee will write one competency by the third week of practicum to be completed during the practicum placement. The competency must be approved by the advisor, supervisor, and cooperating teacher.

B. Professional Behavior Areas

(1) The trainee will verbally recount the following logistical procedures to his/her supervisor by the end of the first week of practicum: attendance, calendar, dress code, fire drill, tornado warning, accident reports, liability, and medication.

(2) The trainee will verbally recount the following practicum placement operations to his/her supervisor by the end of the first week of practicum: (a) ongoing instructional programs for each student, (b) practicum placement daily schedule, and (c) personal role in practicum placement.

(3) The trainee will record in writing his/her daily schedule and will disseminate the schedule to all appropriate persons (e.g., teacher, supervisor) by the end of the second week of practicum. The schedule must be updated within one week of any change.

(4) The trainee will respond appropriately to fire drills, accidents, seizures, weather alerts (tornadoes), and other apparent dangers.

(5) The trainee will maintain student confidentiality.

(6) The trainee will demonstrate appropriate effort, enthusiasm, and honesty.

(7) The trainee will adhere to a daily teaching schedule by beginning and ending instructional activities on time and having materials available for use.

(8) The trainee will consistently implement rules for social behaviors in both structured and unstructured activities.

(9) The trainee will tabulate and graph data at the end of each day.

(10) The trainee will attend and participate in supervisory meetings.

(11) The trainee will implement procedures for change agreed upon with supervisory and/or cooperating teacher.

(12) The trainee will attend and participate in, if possible, at least two of the following professional activities: (a) administrative staffing, (b) medical examination, (c) placement staffing, (d) school board meeting, (e) public hearing, and (f) Association for Retarded Citizens general meeting.

(13) The trainee will attend and participate in classroom meetings when requested.

Second Practicum

A. Performance Areas

(1) The trainee will be responsible for administering a total assessment to at least one student and prepare a written or graphic summary of his/her performance. Assessment should include informal observation, formal assessment, and review of past records.

(2) The trainee will write instructional programs that can be implemented correctly by other classroom staff and substitutes without additional need for written or verbal explanation. The following formats should be used:

Training Objective
Rationale
Students
    Characteristics
    Relevant Behavior Variables
Materials
Instructional Arrangement

47

Instructional Procedures
  Task Analysis/Intervention Procedures
  Movement through the Program
  Data Collection
  Reinforcement
  Error Correction Procedure
  Flowchart
Discussion

(3) The trainee will implement one instructional program in each of the following areas: (a) academic, (b) prevocational/vocational, (c) self-care/motor, (d) behavior management, (e) social behavior, and (f) language. At least one of the programs listed above must be implemented during break time, free time, or play time.

(4) Given data on student performance and an instructional objective for which no appropriate training materials currently exist (either because of the level of the training objective or the kind/degree of disability), the trainee will develop two original materials or adapt existing resources and use them in teaching the target skill.

(5) The trainee will develop and implement a program for daily communication with (a) home, (b) school administration, and (c) others, where appropriate.

(6) The trainee will make prompt modifications in the delivery of instruction as indicated by the data.

(7) Given a classroom setting with tutors/aides/parents/volunteers, the trainee will (a) model appropriate reinforcement procedures, (b) instruct on the implementation of data-based instruction and program changes, (c) assure tutors/aides/parents/volunteers have all materials and charts prepared for sessions, (d) obtain reliability on performance measures, and (e) retrain tutor/aide/parents/volunteers when new skills are necessary or when performance is not satisfactory.

(8) The trainee will conduct and summarize the following meetings designed to generate or review the effectiveness of programs to date and make appropriate modifications: (a) one staffing, and (b) three weekly classroom meetings. Summary will include purpose, planned agenda, actual agenda, evaluation of outcome, assignments for implementing program changes, and summary memo to participants and relevant others.

(9) Self-improvement. The trainee will write three behavioral objectives by the third week of practicum to be completed during the practicum placement. The objectives must be approved by the advisor, supervisor, and cooperating teacher.

B. Professional Behavior Areas

(1) The trainee will demonstrate all professional behaviors presented in the first practicum, professional behavior area, as well as those which follow.

(2) The trainee will observe and identify in writing the practicum placement structure, and possible target behaviors of students for which programs have not been written by the end of the first week of practicum.

(3) The trainee will have all written programs and performance charts available for any observers (e.g., supervisor, cooperating professional, parent, school administrator).

(4) The trainee will prepare an outline of a program and receive approval by his/her supervisor and cooperating professional one week before implementation. A complete instructional program must be written within two weeks after initiating baseline.

(5) Given a group of three or four students, the trainee will deliver an appropriate amount of instruction to each student and will encourage students to learn from other students' task presentation.

Third Practicum

A. Performance Areas

(1) The trainee will write or revise three instructional programs and implement them.

(2) Given case study information on a student who has met all program objectives in his/her current placement, the trainee will prepare an outline for a staffing for moving the student to a less restrictive program or back into the community. The outline must include: (a) identification of possible placement sites, (b) analysis of demands placed on student in each site, (c) selection and justification for choice of further placement, (d) copy of written and graphic summative evaluation of student competencies in various areas of curriculum, (e) plans for follow-up from present placement, and (f) specific steps to program for the generalization and maintenance of behavior change.

(3) Given a practicum placement with tutor/aides/parents/volunteers, the trainee will (a) model appropriate reinforcement procedures, (b) instruct on the implementation of data-based instruction and program changes, (c) assure tutors/aides/parents/volunteers have all materials

and charts prepared for sessions, (d) obtain reliability on performance measures, and (e) retrain tutors/aides/ parents/volunteers when new skills are necessary or when performance is not satisfactory.

(4) The trainee will (a) define competencies required of instructional staff to implement an aspect of a data-based instruction model, (b) design a systematic needs assessment device to identify priority needs of instructional staff to implement an aspect of a data-based instructional model, (c) prepare an inservice to teach priority needs, (d) implement the inservice, and (e) design a summative evaluation of the instructional staff's implementation of inservice objectives.

(5) The trainee will write 12 competencies by the third week of practicum to be completed during the practicum placement. The competencies must be approved by the advisor, supervisor, and cooperating professional.

B. Professional Behavior Areas

(1) The trainee will demonstrate all professional behaviors presented in the second competency, professional behavior areas.

Performance and Professional Behavior Standards Checklist Procedure

Each trainee entering a teacher training program should receive a checklist to be completed during his/her enrollment. The primary purpose of this checklist should be to aid the trainee and faculty advisor in identifying existing trainee strengths as well as areas where training is needed. The following section presents a procedural format that might be followed to meet criteria, other than through university course work; and that might also be followed to complete the "Performance/Procedure Checklist" (see Appendix A) and the Professional Behavior Standards Checklist (see Appendix B). The checklist should be managed by the trainee and completed by the program advisor and/or practicum site supervisor.

Procedures for Meeting Criteria Other Than in University Course Work

During the initial advising period, the trainee should be allowed to present any of the following products to his/her advisor for examination in order to meet a knowledge/performance criterion.

1. A written examination from previous course work;
2. Procedural or substantive outline;
3. Behavioral contracts from past tutoring, parent, or client counseling, etc.;
4. A term paper, original curriculum, or article;
5. Written summaries of research articles;
6. Written or revised instructional programs; and
7. Appropriate graphs and flowcharts.

Advisors, in conjunction with faculty responsible for each course represented above, should determine the acceptability of these products as evidence that a trainee has demonstrated performance at the critical level and that the trainee does not need to repeat the performance area.

Preassessment. An attempt should be made to mail a copy of the "product/performance checklist" to each trainee prior to his/her enrollment in a practicum-based teacher training program. This gives each trainee an opportunity to review the performance/product statements and decide in which ones she/he feels competent. Upon the arrival of the trainee, an initial interview with the advisor should provide the trainee an opportunity to present relevant data indicating where and how the criterion has been reached. The advisor should then determine whether or not a previous product is acceptable. Once a trainee has completed the preassessment evaluation, the remaining performance/product statements should serve as the basis for training.

Where Criterion Can Be Reached. Many of the performances presented in the checklists could be met in any of a number of settings related to the education and training of the moderately/severely handicapped student. Therefore, the trainee and advisor should develop a program strategy directed to the individual needs of the trainee, while efficiently addressing the acquisition of required performances.

Products. The trainee and advisor should determine where the necessary criteria are to be reached through product development. These products may be in the form of term papers, individual and/or group projects, or materials developed by the trainee.

When to Meet Criteria. By determining the specific products or performances to be used in meeting criteria, the trainee is in a position to develop a timeline for meeting these criteria. Decisions regarding the timeline should consider the availability of courses, when they are offered, and the availability of certain practicum situations.

Evaluation: Date/Initials. Either during or upon completion of an experience in which the trainee feels she/he has met one or more criteria, she/he should present the checklist to the person responsible for evaluating the performances or products. That individual should initial and date the appropriate box and return it to the trainee. It should be the responsibility of the trainee to initiate this procedure for each of the criteria within the checklist.

Advisor Initial. It should also be the responsibility of the trainee to have his/her advisor initial each criterion met. This procedure need not occur upon completion of each performance or product; however, a meeting to evaluate both the criteria met and the criteria to be met should be required at least once each semester.

Inservice Training. The rapid growth and expansion of programs to serve moderately and severely handicapped students has resulted in a critical shortage of personnel to provide the necessary efforts to advance these students toward lesser restrictive settings. In this section, one example of an inservice training program that has been used by Dr. Frank R. Rusch to meet these needs is provided. These materials are presented as a template to design and structure inservice training, not as the approach to be followed by the reader. The format of the workshops is based upon the availability of four or five days of trainee time for purposes of presenting the materials and practice. Much of the material covered during this time is contained in a text entitled, Vocational Training for Mentally Retarded Adults (Rusch & Mithaug, 1980).

The following section provides an outline of activity, a pretest/post-test and an outline of each of the separate components presented during the four to five day workshop.

Short Course Outline

Day 1 Introduction

- Survey/train/place
- Behavior analytic approach; behavior measurement
- Pretest
- Film

Day 2 Morning--Observation and Measurement

- Defining behavioral objectives (outcome)
- Measuring behavioral objectives
  - Event-based measures
  - Time-based measures
- Data recording
  - Continuous
  - Time-sampling
    - Whole
    - Partial
    - Momentary
  - Agreement

Afternoon--Evaluating Behavior

- Summative assessment
- Formative assessment
- Data-based decisions

- Displaying data: summary sheets
  - graphing
- Interpreting graphic displays: changes in trend
  - changes in level or step

Observation, data collection
- 5 minute observation, 5 minute off:
  - Whole
  - Partial
  - Momentary

Day 3 Morning--Training, Managing, and Maintaining Behavior

Training:
- Shaping, discrimination, generalization
- Task analysis: Forward/backward chaining
- Single-step/full-sequence training
- Instructional programming: levels of assistance
  - training procedures

Managing:
- Reinforcement
  - Positive
  - Negative
- Extinction
- Punishment
  - Positive
  - Negative

Maintaining:
- Continuous scheduling
- Intermittent scheduling
- Generalized reinforcers

Afternoon--Identifying Vocational and Social Survival Skills

Survival skills:
- Identification
  - Verbal reports
  - Observations
  - Social validation: descriptive/comparative
- Social survival skills
- Vocational survival skills

Day 4 Morning--Placement

- Placement continuum
- Placement survey: mail
  - telephone
- Job analysis survey
- Job task analysis
- Job placement information form
- Ideal employee characteristics form
- Work performance evaluation form
- Procedures

Afternoon--Total Service Planning; Individual Program Planning

Total service planning: advantage
components of TSP
placement committee: members
duties

Individual program planning: purpose
components

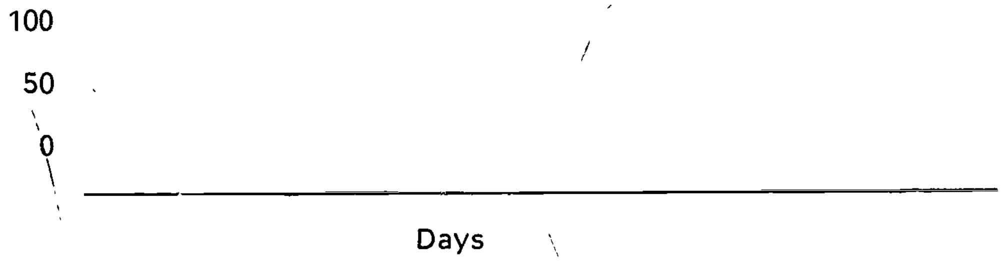
Day 5 Morning--Follow-up

Identification/assessment: objective, subjective
Intervention
Validation
Delivery of follow-up service

Afternoon--Trouble Shooting; Common Problems

Feedback/evaluation, post-test

Pre/posttest

1. What are the differences between continuous and time-sampling data recording procedures?
2. What do you think would be a benefit of using a whole time-sampling procedure?
3. When would you choose to use a momentary time-sampling procedure?
4. Describe the "one variable" rule.
   Why is it important when evaluating behavior?
5. 

   Graph a change in the trend and level of time on-task behavior after corrective feedback was introduced.

6. When graphing data, one should:
   a. label the axes so the vertical axis refers to units of behavior and the horizontal axis refers to units of time.
   b. label the graph to identify the trainee
   c. label the graph to identify the targeted behavior(s)
   d. label the graph to identify the intervention(s) used
   e. show intervention changes with vertical lines
   f. not connect data points between vertical (intervention) lines
   g. a-d
   h. all of the above
7. Name the levels of assistance used for training.

8. Define descriptive and comparative validation.
9. List three (3) vocational survival skills essential to keeping a job.
10. Before placing a handicapped worker in a non-sheltered job (e.g., food service, factory work, etc.), it is often helpful to interview employers and co-workers who have been working at the job for some time. What information can employers or co-workers provide which would help a handicapped worker be successful in a non-sheltered job placement?
11. What are three (3) advantages to establishing goals and objectives through the Total Service Plan (TSP) system?
12. What are the components of a TSP?
13. Who should participate in a TSP staffing?
14. List six reasons for establishing a follow-up program.
15. Briefly discuss the procedure you would use to develop the special considerations section of a work performance evaluation form.

Outline of Topics

Day 1 Introduction of Outline of Topics

Characteristics of a behavior analytic approach to vocational training for competitive employment
Replicable training and management procedures
Individualized training
Direct observation and measurement
Repeated assessments
Objective analysis including quantification
Acquisition, maintenance, and transfer
Social and vocational survival skills
Social acceptability

Day 2 Morning--Observation and Measurement

- Purpose
- Defining behavioral objectives
- Event-based measures
- Time-based measures
- Data-recording
    - Continuous
    - Time-sampling
    - Whole
    - Partial
    - Momentary
- Agreement

Day 2 Afternoon--Evaluating Behavior

- Reasons for assessment
    - Target behavior performance
    - Behavior change
    - Trainee vs. program evaluation
- Summative assessment

- Formative assessment
- Data-based decisions
    - Summarizing and displaying data
        - a. Summary data sheets
        - b. Graphing data
    - Interpreting graphic displays
        - a. Line of progress
        - b. Changes in trend
        - c. Changes in level or step
    - Trainee/program evaluation strategies
        - a. Baseline-intervention
        - b. Multiple-baseline
        - c. Changing criterion
    - Applied (practical) significance
- Summary--The self-correcting evaluation cycle

Day 3 Morning--Training, Managing and Maintaining Behavior

- Introduction to training
- Training behavior
    - Shaping
    - Discrimination
    - Generalization
    - Task analysis
    - Forward/backward chaining
    - Single-step/full-sequence training
    - Instructional programming
- Managing behavior
    - Reinforcement
    - Extinction
    - Punishment
- Maintaining behavior
    - Continuous scheduling
    - Intermittent scheduling
    - Generalized reinforcers

Day 3 Afternoon--Identifying Vocational and Social Survival Skills

- Advantages of including employers and co-workers as sources of information about non-sheltered employment settings
- Types of information which should be collected
- Identifying job requisites
    - Verbal reports
    - Observation
- Identifying vocational survival skills
    - Performance suggested by study
    - Validation by employers/co-workers
- Identifying social survival skills
    - Performance suggested by study
    - Validation by employers/co-workers
- Identifying acceptable training procedures
    - Purpose of assessment
    - Procedures suggested by study

  - Validation by employers/co-workers

Day 4 Morning--Placement

- Identifying possible job placements
- Selecting probable job placements
- Surveying job placements
- Types of placements
- Conducting a placement survey
  - The mailed survey
  - The telephone survey
- Conducting a job analysis
  - Type of firm
  - Importance of speed
  - Number of co-workers trainee will work directly with supervision available
  - Probable cooperation of other employees
  - The teneral social environment
  - Physical appearance
  - Physical conditions
- Task analysis
  - Job behaviors
- Conditions of employment
  - Work hours
  - Shift
  - Pay scale
  - Bonuses/overtime pay
  - Union membership
  - Travel requirements
  - Training
  - Promotional criteria
  - Insurance-health and other benefits
- Worker requirements
  - Education
  - Experience
  - Licenses-certificates
  - Special social/vocational skills
  - Tests
  - Reasons(s) for previous firings or abandonments
  - Contact person
- Analysis of employer, supervisor, and co-worker concerns and expectations
  - Ideal employee characteristics
- Developing a work performance evaluation form
  - Collecting the forms
  - Data analysis
  - Providing feedback
  - Behavioral observations at the employment site
- The placement process
  - Contacting the employee
  - Reviewing the job analysis survey
  - Contacting parents/guardians
  - Interviewing for the job
  - Contacting the placement committee

Day 4 Afternoon-Total Service Planning

- Introduction to the TSP
- Advantages to establishing goal
- Components of a TSP (which meet care standards)
- The TSP staffing
  - The participants at TSP staffings should include:
  - The case manager will chair the staffing
  - The participants will bring into the staffing identified trainee needs based upon the skills needed for successful performance.
    - a. The staffing group will assess needs based on the following questions.
    - b. The group will then prioritize the needs into goals based on:
  - The participants will discuss plans for future placement.
  - The participants will discuss need for interaction with other programs or agencies.
- Individual program plans (IPP)

Goal and Objective Problems Set. Based upon trainees and setting with which you are familiar, develop at least four social and/or vocational goals and at least two objectives for each goal.

Remember, first develop the goal from which the objective will be based. A goal is the final behavior the trainee should process when the training period is over.

Each goal can have one or more objectives. An objective is composed of three components: 1) the exact behavior that is required, 2) the circumstances under which it is to occur, and 3) how well and often the behavior will be performed.

GOAL:

OBJECTIVE
OBJECTIVE

GOAL:

OBJECTIVE
OBJECTIVE

GOAL:

OBJECTIVE
OBJECTIVE

GOAL:

OBJECTIVE
OBJECTIVE

Day 5 Morning--Follow-Up

- Reasons for establishing a follow-up program
  - Early identification of problems
  - Providing on-the-job intervention
  - Seeking validation by significant others
  - Planning intervention by others
  - Fading follow-up checks
  - Evaluation adjustment
- Developing a follow-up program
- Selecting training resources
- Developing training resources
  - The structured verbal report
- Specifying placement training outcomes
  - Three steps to follow for identified deficits
  - Prioritizing deficits
- Delivering follow-up services
  - Adjusted follow-up
  - Fixed follow-up
- Implementing follow-up services
- Administering the work performance evaluation form
- Providing feedback on employee progress
- Maintaining a placement log

Day 5 Afternoon--Evaluation

Job Title____

Years in this position____________________________________

1. I rate my degree of interest in the overall workshop as:

   LOW ____ ____ ____ ____ ____ HIGH

2. I rate the value received from the overall workshop as:

   LOW ____ ____ ____ ____ ____ HIGH

3. I rate the informational value of the handout materials as:

   LOW ____ ____ ____ ____ ____ HIGH

4. I rate the degree to which the workshop has given me a better basis for preparing individual plans as:

   LOW ____ ____ ____ ____ ____ HIGH

5. I rate the ease in understanding handout material:

   UNDERSTANDABLE ____ DIFFICULT ____

6. I rate the ease in understanding classroom presentation:

   UNDERSTANDABLE ____ DIFFICULT ____

7. What specific suggestions for improvement would you like to make:

____

____

____

____

8. Specific points which were valuable or significant to me were:

____

____

____

____

9. Overall workshop comments:

____

In the next section, programs are presented that have been identified as preparing personnel to serve the severely handicapped. The authors have not attempted to employ any "quality indices" to evaluate the programs. Readers interested in further information are urged to write the contact person listed in the program description.

Identification of Practices

Survey Description

This section will identify and discuss present programs that exemplify the suggested guidelines. In order to identify these programs, a survey was conducted of 144 educators who are members of the Division on Career Development (DCD) of the Council for Exceptional Children (CEC) or were identified as teacher educators by the National Association of Vocational Education Special Needs Personnel (NAVESNP) Teacher Education Committee. A letter and survey form were mailed to each educator explaining the nature of the survey. Each educator was asked, "Are you conducting or are you aware of programs that prepare personnel to provide vocational/career education services for moderately and severely handicapped persons?" The respondent was asked to identify the three most exemplary programs of this type and to provide the criteria used to identify these programs. Thirty-two educators returned their surveys. A copy of the letter and survey instrument are appended (see Appendix D and Appendix E).

The 32 respondents identified a total of 29 university programs. The majority of programs identified were programs whose main objective was not to prepare personnel to instruct moderately or severely handicapped individuals but to instruct mildly handicapped individuals. Other mistakenly identified programs were either curriculum development projects or other types of demonstration projects. Each of the programs indicated on the respondent sheets was telephoned or cross-referenced by written response from the director of the program.

The five programs specifically identified as personnel preparation programs were those affiliated with the University of Alabama-Birmingham, University of Wisconsin-Madison, University of Vermont, University of Idaho, and University of Maryland. Brief descriptions of these five programs are included. It is emphasized that these are not necessarily exemplary programs, but simply programs that exist. There are few programs across the country that identify this emphasis as a major program goal.

Program Descriptions

Institution: University of Wisconsin-Madison, Studies in Behavioral Disabilities

Program Director: Dr. Lou Brown

Program Goal: To prepare personnel to instruct persons who are severely mentally handicapped and/or multiply handicapped.

Program Description: This program is designed to offer certification at the undergraduate and master's degree level. The program is generally two semesters long and in each semester a student enrolls in a three credit hour practicum course where they gain daily experience in the teaching of moderately or severely handicapped persons. The practicums take place in and around Madison, Wisconsin. An emphasis of the program is to train students in long-range curriculum planning rather than planning only for the handicapped individuals' immediate needs. These students are trained to provide educational services for the population in the age range from 6 to 21 years. The practicum assignments are divided between the two ranges of 6 to 13 years of age and 13 to 21 years of age. An effort is made to insure that each student has an opportunity to work with each of these age ranges during one academic year. The philosophy of the program includes a large amount of community involvement and the utilization of natural reinforcers and natural cues wherever possible. The program is based on behavioral change principles.

Institution: Special Education Department, University of Maryland

Program Director: Dr. Nick Certo

Program Goal: To prepare personnel to instruct individuals who are severely or profoundly handicapped.

Program Description: This program began in the Fall, 1981. The program is offered at both the graduate and undergraduate level and persons who complete the program will receive generic special education certification. The program is a four semester program with a practicum being a required activity during each of the semesters. Each practicum requires four hours a day of participation in public schools with severely handicapped students in both integrated and self-contained settings. At the undergraduate level, students are trained to instruct students of elementary and secondary school age with an emphasis on career/vocational education. The major specialization comes at the master's degree level where students may identify specific populations or instructional levels.

Institution: Prevocational Training Program, Center for Developmental and Learning Disorders, University of Alabama-Birmingham

Program Director: Dr. Michael Welch

Program Goal: To provide interdisciplinary training to prepare educators to instruct individuals with developmental disabilities.

Program Description: This is a university affiliated facility (UAF) program that concentrates on working with vocational rehabilitation clients 16 to 24 years of age. The program for these clients includes academic-remedial, work adjustment, activities of daily living, work behaviors, and a vocational laboratory. The clients are sponsored by the state vocational rehabilitation agency and are classified as educable mentally retarded, behavioral disordered, learning disabled, and trainable mentally retarded. The undergraduates at the University of Alabama-Birmingham participate in this program for their specific training needs. They may participate for varied periods of time, 0 to 16 hours for observation, 17 to 40 hours for special projects, or 40 to 120 hours for pre-student teaching and internship assignments. At the UAF the students have an opportunity to receive specific training in teaching work adjustment activities of daily living, and other work oriented behaviors. Other facilities include a model apartment and a green house where these behaviors are emphasized. Consumer and career exploration skills are emphasized in a vocational laboratory which is also a part of the program. Students are assigned to this program for training by their instructors in the special education program to obtain specific competencies in career/vocational education.

Institution: Special Education Department, University of Vermont

Program Director: Dr. Wes Williams

Program Goal: To prepare students to instruct severely handicapped students.

Program Description: One focus of this program is preparation in the area of career/vocational education. This is a master's level program which requires students to participate in practicum experiences for four mornings a week. These practicum experiences are a major part of the program and are primarily located in integrated public school settings. An emphasis in this program is the writing of functional IEPs which translate the skills needed to live as an adult into meaningful instructional activities. There is a specific focus on providing training for independent living, vocational skills and community living. This program also uses the Center for Developmental Disorders which is a university affiliated facility to provide training.

Institution: Vocational Special Needs Teacher Education, College of Education, University of Idaho

Program Director: Dr. Jack Kaufman

Program Goal: To prepare vocational/special needs teachers to provide instruction for handicapped and disadvantaged students.

Program Description: This is a vocational special needs teacher education program which prepares teachers who will be certified as vocational special needs instructors. The emphasis in this program is on students who are moderately or mildly handicapped, but there is also a specialization for those interested in the severely handicapped. Although the orientation of this program is totally career/vocational education, students must also receive certification in special education or another vocational area. Those students who specialize in the instruction of severely handicapped individuals complete special education courses in this area. All students must complete practicum and internship experiences as a part of this preparation.

Criteria for Program Inclusion

The second question on the survey related to the criteria that were used to identify these programs. Typical responses were:

- Known training programs
- My familiarity with the personnel
- Significant positive evaluative feedback from project evaluation experts and participants
- No specific criteria
- Quality graduates and type of program

The criteria cited was subjective with no detailed evaluative data. Because there are so few programs of this type it appears that the effort to identify exemplary training programs is unrealistic.

Summary

It is apparent from the results of this survey that there are few programs specifically identified as preparing persons to work with moderately or severely handicapped persons in the area of career/vocational education. Some reasons for this paucity of programs may be the incidence of moderate or severely handicapped persons in any one community, lack of recognition of this area as a priority need, or the unique constellation of behavioral and other skills that are needed to be a competent professional in this area. This survey demonstrates that there is an important need for these types of personnel preparation programs in many parts of the country.

Summary

Examining the field of personnel development as it pertains to serving the severely handicapped, it becomes fairly clear that it is best characterized as an emerging field. The review of literature reveals that while there is much agreement regarding the need for well trained professionals to serve the population of severely handicapped persons, there is little agreement about the content of training programs. Little attention has been given to the needs of inservice practitioners, and when inservice is provided, it is often irrelevant to the teachers' needs. Research that has been done in personnel preparation suggests that the two most crucial variables affecting student learning are the amount of time spent instructing and the percentage of programs task analyzed. Finally, attrition rates for personnel serving the severely handicapped appear to be higher than for other areas of education, but research remains to be done.

In the authors' view, programs providing preservice training for personnel to serve the severely handicapped must be practicum-based. As the degree of the student's disability becomes more pronounced, there is a commensurate increase in the skills needed by the teacher. The goals for the vocational educator should be centered upon making it possible for the student to receive the kind of training that will make productive employment possible. Coursework and competencies need to be developed in the areas of behavior management, measurement, curriculum programming, medical/physical aspects, language, parent and family involvement, secondary/adult vocational training, and legal issues/advocacy.

Practicum experiences for the preservice teacher are performance based and are evaluated on the basis of the trainee's ability to actually change the behavior of severely handicapped students. Included among the skills to be developed are those of assessment, data recording, program development, and evaluation. Furthermore, it is crucial for the trainee to develop certain professional behavior areas.

In the final section of the monograph programs were examined that train personnel to serve the severely handicapped in an attempt to identify programs that best exemplify the suggested guidelines. A survey of 144 educators who were members of the Division on Career Development of the Council for Exceptional Children or the National Association of Vocational Education Special Needs Personnel revealed five programs with this emphasis as a major program goal. The five programs that were identified and described were: the University of Alabama-Birmingham, the University of Wisconsin-Madison, the University of Vermont, University of Idaho, and the University of Maryland.

References

Albright, L., & Clark, G. Preparing vocational and special education personnel to work with special needs students: A teacher education resource guide. Urbana-Champaign, Illinois: University of Illinois, 1976.

Albright, L., Nichols, C., & Pinchak, J. Identification of professional competencies necessary for teachers of disadvantaged and handicapped youth. Kent, Ohio: Kent State University, 1975.

Andreyka, R., Blank, W., & Clark, C. Professional competencies and assessment criteria for administrators and teachers of vocational education programs for the handicapped in Florida. Tallahassee, Florida: Florida State University, 1976.

Bellamy, G. T., Peterson, L., & Close, D. Habilitation of the severely and profoundly retarded: Illustrations of competence. Education and Training of the Mentally Retarded, 1975, 10, 174-186.

Bellamy, G. T., & Wilcox, B. Secondary education for severely handicapped students: Guidelines for quality services. Eugene, Oregon: Center on Human Development, 1980.

Bitter, J. Special education for the EMR adolescent: Student needs and secondary education teacher competencies. In D. Brolin & B. Thomas, Preparing teachers of secondary level educable mentally retarded: A new model. Final Report. Menomonie, Wisconsin: University of Wisconsin-Stout, 1972.

Brock, R. Preparing vocational and special education personnel to work with special needs students: State of the art, 1977. Menomonie, Wisconsin: University of Wisconsin-Stout, 1977.

Brolin, D., & Thomas, B. Preparing teachers of secondary level educable mentally retarded: A new model. Final report. Menomonie, Wisconsin: University of Wisconsin-Stout, 1972.

Burke, P. J., & Cohen, M. The quest for competence in serving the severely/profoundly handicapped: A critical analysis of personnel preparation programs. In E. Sontag, J. Smith & N. Certo (Eds.), Educational programming for the severely and profoundly handicapped. Reston, Virginia: The Council for Exceptional Children, 1977.

Burton, T. A., & Hirshoren, A. The education of severely and profoundly retarded children: Are we sacrificing the child to the concept? Exceptional Children, 1979, 45, 598-602.

Clark, G., & Oliverson, B. Education of secondary personnel: Assumptions and preliminary data. Exceptional Children, 1973, 39, 541-546.

Crosson, J. E. A technique for programming sheltered workshop environments for training severely retarded workers. American Journal of Mental Deficiency, 1969, 73, 814-818.

DuBose, R. Identification. In M. E. Snell (Ed.), Systematic instruction of the moderately and severely handicapped. Columbus, Ohio: Charles E. Merrill Publishing Co., 1978.

Federal Register, 40-35, 1975, 7412.

Feinberg, F. C., & Wood, F. H. Goals for teachers of seriously emotionally disturbed children. Preparing teachers to develop and maintain therapeutic educational environments: The proceedings of a workshop. Minneapolis: University of Minnesota, 1978.

Flexer, R. W., & Martin, A. S. Sheltered workshops and vocational training settings. In M. E. Snell (Ed.), Systematic instruction of the moderately and severely handicapped. Columbus, Ohio: Charles E. Merrill Publishing Co., 1978.

Fredericks, H. D., Anderson, R., & Baldwin, V. Identifying competency indicators of teachers of the severely handicapped. AAESPH Review, 1979, 4, 81-95.

Fredericks, H. D., Anderson, R., Baldwin, V., Grove, D., Moore, M., Moore, W. & Beaird, J. The identification of competencies of teachers of the severely handicapped. Project report (Grant #OEG-0-74-2775), 1978.

Gilmore, J., & Argyros, N. Special education certification: A state of the art survey, 1977 (ERIC Document Reproduction Service No. ED 158 447).

Gold, M. W. 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.

Gold, M. W. Stimulus factors in skill training of retarded adolescents on a complex assembly task: Acquisition, transfer and retention. American Journal of Mental Deficiency, 1972, 76, 517-526.

Gold, M. W. Task analysis of a complex assembly task by the retarded blind. Exceptional Children, 1976, 42, 78-84.

Gold, M. W. The severely retarded in non-sheltered industry. Paper presented at A.A.M.D., Annual Convention, Toronto, Canada, 1974.

Gold, M. W., & Barclay, C. R. The learning of difficult visual discrminations by the moderately and severely retarded. Mental Retardation, 1973, 11, 9-11.

Gold, M. W., & Pomerantz, D. J. Issues in prevocational training. In M. E. Snell (Ed.), Systematic instruction of the moderately and severely handicapped. Columbus, Ohio: Charles E. Merrill Publishing Co., 1978.

Grosenick, J. K., & Huntze, S. L. National needs analysis in behavior disorders: Severe behavior disorders. Columbia, Missouri: University of Missouri, 1980.

Hart, V. The use of many disciplines with the severely and profoundly handicapped. In E. Sontag, J. Smith, & N. Certo (Eds.), Educational programming for the severely and profoundly handicapped. Reston, Virginia: Council for Exceptional Children, 1977.

Horner, R. H., & Bellamy, G. T. A conceptual analysis of vocational training. In M. E. Snell (Ed.), Systematic instruction of the moderately and severely handicapped. Columbus, Ohio: Charles E. Merrill Publishing Co., 1978.

Hull, M., & Halloran, W. Professional development program for vocational educators of handicapped students, Final report. Montpelier, Vermont: Vermont State Department of Education, 1974.

Kruppa, J., Hirtz, S., & Thrower, R. Preparing teachers of industrial education for disadvantaged and handicapped children at the secondary level: A model for curriculum and development. Trenton, New Jersey: Trenton State College, 1973.

Levy, S. M., Pomerantz, D. J., & Gold, M. W. Work skill development. In H. G. Haring & L. J. Brown (Eds.), Teaching the severely handicapped (Vol. 2). New York: Grune and Stratton, 1977.

Marozas, D. S., & May, D. C. Factors which motivate job acceptance among teachers of severely and profoundly mentally retarded children. Education and Training of the Mentally Retarded, 1980, 15, 293-297.

McCormick, L., Cooper, M., & Goldman, R. Training teachers to maximize instructional time provided to severely and profoundly handicapped children. AAESPH Review, 1979, 4, 301-310.

Mori, A. A., & Masters, L. F. Teaching the severely mentally retarded: Adaptive skills training. Germantown, Maryland: Aspen Systems Corporation, 1980.

Neilson, O., Johnson, D., & Frank K. An investigation of the teaching competencies needed to utilize diagnostic test data in prescribing occupational learning experiences in teaching EMRs: Interim report. Menomonie, Wisconsin: University of Wisconsin-Stout, Center for Vocational, Technical, and Adult Education, 1975.

Perske, R., & Smith, J. (Eds.) Beyond the ordinary: The preparation of professionals to educate severely and profoundly handicapped persons toward the development of standards and criteria. (ERIC Document Reproduction Services No. ED 182 873, 1977.)

Phelps, L., Evans, R., Abbas, E., & Frison, K. Vocational education for the special needs students: Competencies and models for personnel preparation. Urbana, Illinois: University of Illinois, Department of Vocational and Technical Education, 1976.

Rusch, F. R., & Mithaug, D. E. Vocational training for mentally retarded adults: A behavior analytic approach. Champaign, Illinois: Research Press, 1980.

Sailor, W., & Haring, N. G. Some current directions in education of the severely/multiply handicapped. AAESPH Review, 1977, 2 3-23.

Snell, M. E., Thompson, M. S., & Taylor, K. G. Providing inservice to educators of the severely handicapped: The active response inservice training model. Education and Training of the Mentally Retarded, 1979, 14, 25-33.

Sontag, E. Zero exclusion: Rhetoric no longer. Paper presented to the Second Annual Meeting of the American Association for the Education of the Severely/Profoundly Handicapped, Kansas City, Missouri, November, 1975.

Sontag, E., Burke, P. J., & York, R. Considerations for serving the severely handicapped in the public schools. Education and Training of the Mentally Retarded, 1973, 8, 20-26.

Sontag, E., Certo, N., & Button, J. E. On a distinction between the education of the severely and profoundly handicapped and a doctrine of limitations. Exceptional Children, 1979, 45, 604-616.

Sontag, E., Smith, J., & Sailor, W. The severely and profoundly handicapped: Who are they? Where are we? The Journal of Special Education, 1977, 11, 5-11.

Stainback, S., Stainback, W., & Maurer, S. Training teachers for the severely and profoundly handicapped: A new frontier. Exceptional Children, 1976, 42, 203-210.

Tawney, J. W. New considerations for the severely and profoundly handicapped. In R. D. Kneedler & S. G. Tarver (Eds.), Changing perspectives in special education. Columbus, Ohio: Charles E. Merrill Publishing Co., 1977.

Thurman, S. K., & Hare, B. A. Teacher training in special education: Some perspectives circa 1980. Education and Training of the Mentally Retarded, 1979, 14, 292-295.

Van Etten, G., Arkell, C., & Van Etten, C. The severely and profoundly handicapped: Programs, methods and materials. St. Louis: The C. V. Mosby Co., 1980.

Wehman, P. Curriculum design for the severely and profoundly handicapped. New York: Human Sciences Press, 1979.

Weissman-Frisch, N., Crowell, F. A., & Inman, D. P. Inservicing vocational trainers: A multiple perspective evaluation approach. Journal of the Association for the Severely Handicapped, 1980, 5, 158-173.

Appendices

Appendix A

Performance/Procedure Checklist

CRITERION PERFORMANCE CHECKLIST

Name ______________________________

Advisor ______________________________ Date Entered Program ______________________________

Objective	Preassessment	Where to meet comp.	Product	Semester to meet comp.	Evaluated (date/initial)	Advisor Initials	Comment
I. BEHAVIOR MANAGEMENT							
A. Knowledge Areas							
1. a. positive reinforcement							
b. removing interference							
c. gen. & maintenance							
d. shaping & fading							
e. chaining							
f. modeling & imitation							
g. guidance							
2. maintain new behaviors							
3. a. extinction							
b. time out							
c. response cost							
d. diff. reinforcement							
e. satiation							
f. reinf. incompat. beh.							
g. punishment							

CRITERION PERFORMANCE CHECKLIST CON'T.

Objective	Preassess-ment	Where to meet comp.	Product	Semester to meet comp.	Evaluated (date/initial).	Advisor Initials	Comment
4. eval. interven. effect							
5 contn contracting							
6 group contingencies							
B. Performance Areas							
1 research articles							
2 observ procedures							
3 calculate reliability							
4 non-cumulative graphing							
5 cumulative graphing							
6 token systems							
II. MEASUREMENT							
A. Knowledge Areas							
1. research articles							
2 norm/criterion tests							
3. descriptive statistics							
4 material evaluation							

77

73

CRITERION PERFORMANCE CHECKLIST CON'T.

Objective	Preassessment	Where to meet comp.	Product	Semester to meet comp.	Evaluated (date/initial)	Advisor Initials	Comment
B. Performance Areas							
1. criterion instrument							
2. written/graphic summary							
3. standard assessment							
4. observation systems							
5 needs assessment							
III. CURRICULUM PROGRAMMING							
A. Knowledge Areas							
1. research articles							
a. issues							
b. considerations							
c. discrimination							
d. generalization							
e. task analysis							
f. math							
g. self-help							
h. motor							

CRITERION PERFORMANCE CHECKLIST CON'T.

Objective	Preassess-ment	Where to meet comp.	Product	Semester to meet comp.	Evaluated (date/initial)	Advisor Initials	Comment
i. social							
j. reading							
k. problem solving							
B. Performance Areas							
1. evaluate/CR instrument							
a. prerequisite							
b. self-help							
c. social							
d. reading							
e. math							
f. discrimination							
g. problem solving							
2. evaluate curr. guides							
3. write IEP							
4. skill acquisition							
5. daily regimen							

CRITERION PERFORMANCE CHECKLIST CON'T.

Objective	Preassessment	Where to meet comp.	Product	Semester to meet comp.	Evaluated (date/initial)	Advisor Initials	Comment
IV. MEDICAL/PHYSICAL							
A. Knowledge Areas							
1. physical/motor develop.							
2. cerebral palsy							
3. epileptic seizures							
4. moving CP students							
5. feeding							
6. dressing							
7. toileting							
8. a. seizure drugs							
b. CP drugs							
9. a. degenerative diseases							
b. lower incidence							
c. sensory handicaps							
d. MR syndromes							
B. Performance Areas							
1. CR instrument							

CRITERION PERFORMANCE CHECKLIST CON'T.

Objective	Preassessment	Where to meet comp.	Product	Semester to meet comp.	Evaluated (date/initial)	Advisor Initials	Comment
2. a. assess reflexes							
b. physical restrictions							
c. questions to O.T /P T							
3. techniques with CPs							
4. positioning with CPs							
5. instructional program							
6. drug assessment							
V. LANGUAGE							
A. Knowledge Areas							
1. research articles							
2. language articles							
B. Performance Areas							
1. CR instrument							
2. design lang. board							
3. lang. curriculum assess							
4. a. summary							
b. comm. program							

CRITERION PERFORMANCE CHECKLIST CON'T.

Objective	Preassess-ment	Where to meet comp.	Product	Semester to meet comp.	Evaluated (date/initial)	Advisor Initials	Comment
5. language report							
6. questions to S.T.							
7. evaluate programs							
a. pre-primary							
b. intermediate							
c. secondary							
8. symbol systems							
9. learning signs							
VI. PARENT AND FAMILY INVOLVEMENT							
A. Knowledge Areas							
1. research articles							
B. Performance Areas							
1. inservice training							
2. report card system							
3. parent/school contacts							
4. home visits							
5. eval. materials							

CRITERION PERFORMANCE CHECKLIST CON'T.

Objective	Preassessment	Where to meet comp.	Product	Semester to meet comp.	Evaluated (date/initial)	Advisor Initials	Comment
VII. SECONDARY ADULT VOCATIONAL TRAINING							
A. Knowledge Areas							
1. research articles							
2. voc. programming							
3. funding sources							
4 counseling info.							
5. student placement							
B. Performance Areas							
1. develop CR instrument							
a. home living							
b. community living							
c. recreational							
d. sex education							
e. vocational							
f. social							
2. eval. NR device							

CRITERION PERFORMANCE CHECKLIST CON'T.

Objective	Preassessment	Where to meet comp.	Product	Semester to meet comp.	Evaluated (date/initial)	Advisor Initials	Comment
3. career counseling							
4. design prosthetic							
5. outline a staffing							
6. info. to peers							
7. design community prog.							
VIII. LEGAL ISSUES/ADVOCACY							
A. Knowledge Areas							
1. components of							
a. 94-142							
b. Section 504							
c. rules & regulations							
B. Performance Areas							
1. child find procedures							
2. legal actions							
3. increase services							
4. outline article							

CRITERION PERFORMANCE CHECKLIST CON'T.

Objective	Preassessment	Where to meet comp.	Product	Semester to meet comp.	Evaluated (date/initial)	Advisor Initials	Comment
IX. FIRST PRACTICUM							
A. Performance Areas							
1. program implementation							
a. 1:1							
b. small group							
c. large group							
d. behavior management							
2. data collection							
a. 1:1							
b. small group							
c. large group							
d. behavior management							
3. group instruction							
4. self-improvement							
X. SECOND PRACTICUM							
A. Performance Areas							
1. total assessment							

CRITERION PERFORMANCE CHECKLIST CON'T.

Objective	Preassess-ment	Where to meet comp.	Product	Semester to meet comp.	Evaluated (date/initial)	Advisor Initials	Comment
2. program writing							
3. program implementation							
a. academic							
b. prevocational/vocational							
c. self-care/motor							
d. behavior management							
e. social							
f. language							
4. develop materials							
5. develop communications							
a. home							
b. school adm.							
c. other(s)							
6. mod. instruc. delivery							
7. train personnel in							
a. reinforcement							
b. data-based instruction							

CRITERION PERFORMANCE CHECKLIST CON'T.

Objective	Preassessment	Where to meet comp.	Product	Semester to meet comp.	Evaluated (date/initial)	Advisor Initials	Comment
c. preparing materials							
d. reliability							
e. retraining							
8. conduct meetings							
a. staffing							
b. classroom							
9. self-improvement							
XI. THIRD PRACTICUM							
A. Performance Areas							
1. write programs							
2. outline staffing							
3. train personnel in							
a. reinforcement							
b. data-based instruc.							
c. preparing material							
d. reliability							
e. design/evaluation							

CRITERION PERFORMANCE CHECKLIST CON'T.

Objective	Preassess-ment	Where to meet comp.	Product	Semester to meet comp.	Evaluated (date/initial)	Advisor Initials	Comment
4. a. define competencies							
b. design needs assess.							
c. prepare inservice							
d. implement inservice							
e. evaluation							
5. self-improvement							

Appendix B

Professional Behavior Standards Checklist

ERIC
Full Text Provided by ERIC

PROFESSIONAL BEHAVIOR STANDARDS CHECKLIST

First Practicum	First	Second	Third	Last	Comment
B. Professional Behavior Standards					
1. recount procedures					
2. recount operations					
3. record schedule					
4. respond to safeguards					
5. confidentiality					
6. approp. effort, etc.					
7. adhere to schedule					
8. implement rules					
9. graph data					
10. attend meetings					
11. implement procedures					
12. attend activities					
13. attend classroom meetings					

Second Practicum					
B. Professional Behavior Standards					
1. recount procedures					

PROFESSIONAL BEHAVIOR STANDARDS CHECKLIST *

	First	Second	Third	Last	Comment
2. recount operations					
3. record schedule					
4. respond to safeguards					
5. confidentiality					
6. approp. effort, etc.					
7. observe structure					
8. charts available					
9. outline program					
10. adhere to schedule					
11. implement rules					
12. graph data					
13. instructional time					
14. program specifications					
15. group instruction					
16. reinforcers					
17. attend meetings					

Appendix C

Suggested Readings

Training Texts

Bellamy, G. T., Horner, R. H., & Inman, D. P. Vocational habilitation of severely retarded adults: A direct service technology. Baltimore, MD: University Park Press, 1979.

The book presents procedural guidelines for task analysis, vocational training, production supervision, and outlines technical procedures that are most useful in direct service.

Bellamy, G. T., O'Connor, G., & Karan, O. C. (Eds.). Vocational rehabilitation of severely handicapped persons: Contemporary service strategies. Baltimore, MD: University Park Press, 1979.

The text offers a series of readings intended to provide an overview of current efforts to include severely handicapped adults in community life. The authors focus on developing strategies for the implementation of the technology of vocational rehabilitation, and describe efforts to provide improved vocational opportunities in pubic schools, sheltered workshops, institutions, and activity centers. Topics of discussion range from assessment to the development of a work ethic in severely mentally retarded people.

Kazdin, A. E. Behavior modification in applied settings. Homewood, IL: Dorsey Press, 1975.

This book provides an introduction to behavior modification techniques in applied settings. The major focus is placed on the application of operant principles, implementation of behavior modification techniques, and measurement and evaluation of program effectiveness.

A major portion of the text elaborates positive reinforcement, punishment and negative reinforcement and extinction. The final chapters deal with self-control, response maintenance and transfer of training, and ethical considerations. Book includes a glossary of technical terms.

Mori, A. A., & Masters, L. F. Teaching the severely mentally retarded: Adaptive skills training. Germantown, MD: Aspen Systems Corporation, 1980.

Contents of this text include chapters on the nature and needs of the severely retarded, defining and assessing adaptive behavior, planning activities, motor skills training, communication skills training, self-help skills training, social skills training, mobility skills training, the sheltered workshop, adapted physical education and recreation skills training, and resources for individuals working with the severely retarded.

Rusch, F. R., & Mithaug, D. E. Vocational training for mentally retarded adults: A behavior analytic approach. Champaign, IL: Research Press, 1979.

The focus of this text is on the problems associated with training and placing mentally retarded individuals who do not advance through the existing hierarchy of vocational training opportunities. Three main topics are dealt with: 1) the essential characteristics of a vocational training program; 2) identifying what to teach; and, 3) implementation of a placement program.

Snell, M. E. (Ed.). *Systematic instruction of the moderately and severely handicapped*. Columbus, OH: Merrill Publishing Company, 1978.

The text consists of a series of articles which cover a range of curricula relevant to teaching the severely handicapped. Topics covered include: intervention strategies, classroom management techniques, instructional planning, sheltered workshops, parent-professional interactions, and identification.

Sontag, E., Smith, J., & Certo, N. (Eds.). *Educational programming for the severely and profoundly handicapped*. Reston, VA: Division on Mental Retardation, Council for Exceptional Children, 1977.

Consisting of a series of short articles, the text covers such topics as community integration of the handicapped, services for families, teaching strategies, measurement, selecting curriculum, the role of the educational team, and team training.

Sulzer, B., & Mayer, G. R. *Behavior modification procedure for school personnel*. Hinsdale, IL: Dryden Press, 1972.

The book applies many of the operant learning principles that govern human behavior to the modification of behavior in the school setting. The book is divided into six main parts which cover the topics of reinforcement procedures, teaching new behaviors, maintaining behaviors, reducing behaviors, and evaluating programs. A glossary of terms is located at the end of the book.

York, B., & Edgar, G. (Eds.) *Teaching the severely handicapped* (Vol. 4). Columbus, OH: Special Press, 1980.

Contents of Volume IV include chapters on the need to combine care giving and the activities of daily living with instruction; a review of the literature in the area of mealtime skills; a review of recreational skills education and one of vocational education; a discussion of communitization; and, a discussion of programs run by parents using professionals as consultants.

Readings

AAMD adaptive behavior scale for children and adults. American Association on Mental Deficiency, 1975.

Barber, G. A., Mannino, J. P., & Will, R. J. Developmental assessment of life experiences (3rd ed.). Erie: The Dr. Gertrude A. Barber Center, 1979.

Bates, P. The effectiveness of interpersonal skills training on the social skills acquisition of moderately and mildly handicapped adults. Journal of Applied Behavior Analysis. In press.

Blackman, MD, R. G. Mother's Encyclopedia. New York: Parents Magazine Enterprises, 1965.

Carney, I. H., Menchetti, B. M., & Orelove, F. P. Community transportation: Teaching moderately handicapped adults to ride the Champaign-Urbana mass transit system. In B. Wilcox, F. Kohl, & R. T. Vogelsburg (Eds.), The severely and profoundly handicapped child. Springfield, IL: State Board of Education, 1977.

Cohen, M. A., & Gross, P. J. The developmental resource, behavioral sequences for assessment and program planning (Vol. 1). New York: Grune and Stratton, 1979.

Cuvo, A. J., Leaf, R. B., & Borakove, L. D. Teaching janitorial skills to the mentally retarded: Acquisition, generalization, and maintenance, Journal of Applied Behavior Analysis, 1978, 11, 345-355.

Gold, M. W. Research on the vocational rehabilitation of the retarded; the present, the future. In N. R. Ellis (Ed.) International review of research in mental retardation. New York: Academic Press, 1973.

Gold, M. W. Stimulus factors in skill training of retarded adolescents on a complex assembly task: Acquisition, transfer, retention. American Journal of Mental Deficiency, 1974, 79, 338-347.

Gold, M. Vocational training. In J. Wortis (Ed.), Mental retardation and developmental disabilities: An annual review (Vol. 7).

Greenleigh Associates. The role of the sheltered workshops in the rehabilitation of the severely handicapped. Report to the U.S. Department of Health, Education and Welfare, Rehabilitation Services Administration, Washington, D.C., 1975.

Gruber, B., Reeser, R., & Reid, D. H. Providing a less restrictive environment for profoundly retarded persons by teaching independent walking skills. Journal of Applied Behavior Analysis, 1979, 12, 285-297.

Hunter, J., & Bellamy, G. T. Cable harness construction for severely retarded adults: Demonstration of training techniques. AAESPH Review, 1976, 1, 2-13.

Karan, O. C., Orstein, G. S., Harvey, J., Bales, P., Renzaglia, A., & Rosenthal, D. An extended evaluation model for severely handicapped. AAESPH Review, 1979, 4, 374-398.

Knapczyk, D. R., & Dever, R. B. The role of supervisory personnel in programs for the severely handicapped. AAESPH Review, 1979, 4, 346-353.

Mithaug, D. E. The relationship between programmed instruction and task analysis in the prevocational training of severely and profoundly handicapped persons. AAESPH Review, in press.

Mithaug, D. E., & Hagmeier, L. D. The development of procedures to assess prevocational competencies of severely handicapped young adults. AAESPH Review, 1978, 3, 94-115.

Mithaug, D. E., Hagmeier, L. D., & Harding, N. G. The relationship between training activities and job placement in vocational education of the severely and profoundly handicapped. AAESPH Review, 1977, 2, 89-109.

Mithaug, D. E., Mar, D. K., & Steward, J. Prevocational assessment and curriculum guide. Seattle: Exceptional Education, 1978.

Nutter, D., & Reid, D. H. Teaching retarded women a clothing selection skill using community norms. Journal of Applied Behavior Analysis, 1978, 4, 475-487.

Rusch, F. R. Toward the validation of social/vocational survival skills. Mental Retardation, 1979, 17, 143-145.

Rusch, F. R., Close, D. W., Hops, H., & Gosta, J. Overcorrection: Generalization and maintenance. Journal of Applied Behavior Analysis, 1976, 9, 498.

Rusch, F., & Schutz, R. Nonsheltered competitive employment of the mentally retarded adult: Research to reality? Journal of Contemporary Business, in press.

Rusch, F., Weithers, J., Menchetti, B., & Schutz, R. Social validation of a program to reduce topic repetition in a nonsheltered setting. Education and Training of the Mentally Retarded, in press.

Schutz, R., Rusch, F., & Lamson, D. Eliminating unacceptable behavior: Evaluation of an employer's procedure to eliminate unacceptable behavior on the job. Community Services Forum, 1979, 1 4-5.

Smith, B., & Stevens, G. The emergency book: You can save a life. New York: Simon and Schuster, 1978.

Sowers, J., Rusch, F. R., & Hudson, C. Training a severely retarded young adult to ride the city bus to and from work. AAESPH Review, 1979, 4, 15-22.

Sowers, J., Rusch, F. R., Connis, R. T., & Cummings, L. E. Teaching mentally retarded adults to time-manage in vocational setting. Journal of Applied Behavior Analysis, in press.

The American National Red Cross. Standard first aid and personal safety. Garden City, NY: Doubleday, 1976.

Vogelsberg, R. T., & Rusch, F. R. Training severely handicapped students to cross partially controlled intersections. AAESPH Review, 1979.

Wehman, P., Renzaglia, A., Berry, G., Schutz, R., & Karan, O. Developing a leisure skill repertoire in severely and profoundly handicapped persons. AAESPH Review, 1978, 3, 162-172.

Wehman, P., & Schleien, S. Leisure skills curriculum for developmentally disabled persons: Virginia model. Paper presented at the Illinois Office of Education Conference for Educators of the Severely and Profoundly Handicapped, 1979.

Wehman, P. Toward a social skills curriculum for developmentally disabled clients in vocational settings. Rehabilitation Literature, 1975, 36, 341-348.

Wolfensberger, W. Normalization: The principle of normalization in human services. Toronto: National Institute on Mental Retardation, 1972.

Appendix D

Letter of Transmittal

UTD

THE UNIVERSITY OF TEXAS AT DALLAS

April 14, 1981

Dear Colleague:

I am a member of a writing team that is preparing a monograph in the series entitled Guidelines and Best Practices for Personnel Development. This is one in a series of monographs on personnel development that will be published by the Leadership Training Institute/Vocational and Special Education at the University of Illinois at Urbana-Champaign that is directed by L. Allen Phelps. The monograph for which I share responsibility is entitled Special Populations - Moderately and Severely Handicapped and specifically, I am responsible for the section concerned with the identification of "best practices". In this section I would like to identify and briefly describe five exemplary programs that prepare personnel to provide vocational/career education services to moderately and severely handicapped persons.

As a part of my responsibility for this monograph, it would be helpful to me if you would respond to the one page survey form that is included. You have been selected to respond to this survey because of your membership in professional organizations and because of the activities for which you have responsibility in your present position. If you would like your reply to remain confidential, do not include your name on the reply form.

Thank you for reading and taking the time to respond to this survey.

Sincerely,

George W. Fair, Ph.D.
Associate Professor
School of Human Development

Enclosures

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

BOX 688 RICHARDSON, TEXAS 75080

Appendix E

Survey Form

112

Respondent's name ____________________

SURVEY FORM

1. Are you conducting or are you aware of programs that prepare personnel to provide vocational/career education services for moderately and severely handicapped persons?

   Please name the three most exemplary programs:

   Program name ____________________

   Address ____________________

   ____

   Director ____________________

   Program name ____________________

   Address ____________________

   ____

   Director ____________________

   Program name ____________________

   Address ____________________

   ____

   Director ____________________

2. What criteria did you use in identifying the above programs?

   ____

   ____

   ____

   ____

Please mail this form to:

George W. Fair, Ph.D.
Associate Professor
School of Human Development
The University of Texas at Dallas
P.O. Box 688
Richardson, Texas 75080