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ABSTRACT

Three newsletters focus on disability issues. The first provides an overview of the nature of learning disabilities (LD) and intervention approaches for the condition. Research on effective educational methods for use with LD students is reviewed for such topic areas as the transition from school to work and independent living. Suggestions for preparing LD students for college are offered, including approaches for use by high school teachers. The Massachusetts legislation barring of the use of standardized achievement tests as higher education admission criteria for students diagnosed as developmentally disabled is briefly described. The second issue addresses psychological testing of children with disabilities, focusing on infant development scales, preschool and school-age intelligence tests, special abilities tests, and personality tests. Issues involved in testing children with specific handicapping conditions are reviewed. The third issue of the newsletter presents guidelines to help parents and families find information and services, cope with stress, and prepare for the future. (CL)

# NEWS DIGEST

Information from the
National Information Center for
Handicapped Children and Youth

1985

News Digest

Information from the
National Information Center for
Handicapped Children and Youth

JUNE 1985

# INTRODUCTION

Over the past several years, there has been a dramatic increase in the number of children classified as learning disabled and receiving special education services. According to data provided by the states to the U.S. Department of Education's Special Education Programs, 1,811,489 learning disabled children were receiving special education services in America's schools in school year 1983-84, an increase of 127% over the 797,213 children receiving such services in the 1976-77 school year. According to these data, in the 1983-84 school year 4.57% of children enrolled in the public schools were diagnosed as learning disabled and were receiving special education services.

This trend is reflected in the letters received by the National Information Center for Handicapped Children and Youth (NICHCY) that required individually researched responses. A recent analysis of these letters found that learning disabilities was the handicapping category most frequently inquired about, and in fact, it was the topic of concern more than twice as often as the category ranked second.

The growth in the number of children classified as learning disabled has been accompanied by an increase in the amount of research that psychologists, educators, and others have devoted to the subject. The purpose of this paper is to provide a guide to parents, teachers, professionals in related services; and other interested persons to the literature concerning key issues in serving learning disabled young people. The subjects of the articles are based on the questions most frequently asked by parents writing to NICHCY about the needs of their children.

## How Do I Know If My Child Has a Learning Disability?

A good place to start in determining if a child has a learning disability is with the definition. The term "learning disability" came into use in the early 1960's. Previously, the terms "brain damage" or "minimal brain dysfunction" were used to describe the problem. Over the years a variety of definitions were proposed with input from psychologists, special educators, and physicians. In 1975 a definition originally developed in 1968 by the National Advisory Committee on Handicapped Children was incorporated into Public Law 94-142, the Education for All Handicapped Children Act, a federal law mandating that all handicapped children have the right to a free appropriate public education. The definition, which is contained in the federal regulations on learning disabilities (*Federal Register*, December 29, 1977, 42(250), 65082-65085), states that a learning disability is a "disorder in one or more of the psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell or to do mathematical calculations."

It further states that learning disabilities include "such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia." According to the definition, the term does not include learning problems that are primarily the result of visual, hearing, or motor handicaps; mental retardation or emotional disturbance; or environmental, cultural, or economic disadvantage.

In addition to this definition, the federal regulations provide the following criteria for determining whether a child has a learning disability:

a) The child does not achieve commensurate with his or her age and ability level in one or more of the following areas when provided with learning experiences appropriate for the child's age and ability level:

- oral expression,
- listening comprehension,
- written expression,
- basic reading skills,
- reading comprehension,
- mathematics calculation, or
- mathematics reasoning.

b) The child has a severe discrepancy between achievement and intellectual ability in one or more of the areas listed in the preceding statement.

Although this definition was widely accepted, professionals continued to discuss its merits, and in 1981 the National Joint Committee on Learning Disabilities provided the following alternative definition:

*Learning disabilities is a generic term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. These disorders are intrinsic to the individual and presumed to be due to central nervous system dysfunction. Even though*

"Just as there are a variety of approaches to defining learning disabilies, there are a variety of approaches to determining whether or not a particular child is learning disabled."

*a learning disability may occur concomitantly with other handicapping conditions (e.g., sensory impairment, mental retardation, social and emotional disturbance) or environmental influences (e.g., cultural differences, insufficient/inappropriate instruction, psychogenic factors), it is not the direct result of those conditions or influences.*

In 1984 the Association for Children and Adults with Learning Disabilities adopted a definition which stressed the potential of learning disabilities for affecting people throughout their lives:

*Specific Learning Disabilities is a chronic condition of presumed neurological orgin which selectively interferes with the development, integration, and/or demonstration of verbal and/or non-verbal abilities.*

*Specific Learning Disabilities exists as a distinct handicapping condition in the presence of average to superior intelligence, adequate sensory and motor systems, and adequate learning opportunities. The condition varies in its manifestations and in degree of severity.*

*Throughout life the condition can affect self-esteem, education, vocation, socialization, and/or daily living activities.*

A discussion of the development of the definitions and an analysis of the terminology used are provided in Mercer's chapter on learning disabilities in *Exceptional Children and Youth: An Introduction to Special Education* (1981), and in Myers and Hammill's (1982) *Learning Disabilities: Basic Concepts, Assessment Practices, and Instructional Strategies*. Myers and Hammill further devote a chapter to describing the major types of learning disabilities (spoken language, written language, arithmetic, and reasoning). The Epilepsy Foundation of America (1984) has suggested that learning disabilities are sometimes symptoms of brief blanking out seizures that make it difficult for a child to concentrate. An indication of the diversity of opinion that continues to exist on the topic is provided in a series of articles published in the January, 1983 *Journal of Learning Disabilities*.

Just as there are a variety of approaches to defining learning disabilities, there are a variety of approaches to determining whether or not a particular child is learning disabled. In fact, in a survey of 307 research studies, Kavale and Nye (1981) concluded that little consensus exists regarding identification criteria. Another study reflecting the problems involved is Susan Epps' (1982) *Interjudge Agreement in Classifying Students as Learning Disabled*.

Even though problems exist, there are guidelines within the legal definition for determining whether or not a child is learning disabled. First it must be determined whether the child's learning problems result from a handicap other than a learning disability or from a lack of appropriate opportunities to learn. If either is the case, then the child is not learning disabled. If neither is the case, then it is necessary to determine whether the child is functioning at his or her age or ability level in the areas of spoken language, written language, mathematics, or reasoning and whether a severe discrepancy exists between the child's achievement and intellectual ability in any of these areas. Both formal and informal assessments must be used to obtain a balanced view of the child's actual and potential achievement.

Formal assessment involves using standardized tests that are norm referenced. Standardized means that the tests are given to all children under similar conditions and norm referenced means that the child's score is compared to the scores of a representative group of children of the same age. Examples of such tests are the Wechsler Intelligence Scale for Children—Revised, the Bender Visual Motor Gestalt Test, and the Peabody Picture Vocabulary Test. Information on standardized tests and the theories behind them can be obtained from Klein's (1977) *Psychological Testing for Children: A Consumer's Guide* and Woodrich's (1984) *Children's Psychological Testing: A Guide for Nonpsychologists*.

Informal assessment involves carefully observing a child's total behavior while he or she performs tasks in a natural setting. For example, the child's ability to complete each of the subskills of a task might be observed as well as his or her learning style on such dimensions as flexibility, orderliness, ability to sustain interest, and ability to make decisions.

Myers and Hammill (1982) provide an overview of the assessment procedures involved in determining whether a student is learning disabled. They discuss both formal and informal assessment in oral language, written language, and arithmetic. For each area, they provide a list of standardized tests and an example of an observation checklist. The standardized tests are categorized according to purpose, elements, and age range. Sabatino, Miller, and Schmidt (1981) *Learning Disabilities: Systemizing Teaching and Service Delivery* also discusses the assessment process for learning disabled students.

Either the parents or the school can initiate an evaluation. In both cases, the school system must inform the parents in writing of their decision either to conduct or not to conduct the evaluation and provide the parents with a full description of the procedural safeguards afforded them under the law. Parents also may obtain an independent evaluation at public expense if they disagree with the evaluation conducted through the school system.

## What Services Should My Child Be Receiving?

Parents who want to work with the schools to ensure that their children receive appropriate services should begin by learning about the alternative teaching techniques, materials, and programs developed especially to assist learning disabled students. They should also be familiar with the setting in which the child might be taught and with some of the new approaches used to assist teachers in providing services within regular classes. The teaching techniques described in the literature on learning disabilities include comprehensive approaches with a strong theoretical basis and approaches aimed at helping the student in specific areas like reading, writing, or mathematics. Gearheart (1981) discusses in detail a number of these strategies including the perceptual motor, multisensory, and language development approaches. These are the major comprehensive systems. In addition, Gearheart covers behavior modification; approaches used with hyperactive students; and approaches for teaching reading, arithmetic, and writing. Myers and Hammill (1982) also discuss these approaches and further discuss studies conducted on the effectiveness of the perceptual motor approach. Both the Gearheart and the Myers and Hammill books also include chapters on diet and drug therapies.

> "Not only the teaching techniques but also the setting in which the child is taught must be considered in determining an appropriate program."

A list of materials available for teaching learning disabled students is provided in Sabatino, Miller, and Schmidt (1981). The list is divided into nine broad categories as follows: motor skills, visual perception, language, academics, independent living skills, study skills, home economics, career-vocational education, and affective education. The names and addresses of the publishers as well as the cost of materials are also provided.

Learning disabled students often have social as well as academic difficulties. Hersh and Walker (1983) describe a curriculum they are devising to help handicapped students meet the social behavior standards found to be important to teachers and thus to help the students function better in regular classes. Slavin has found that cooperative learning methods such as Team Assisted Individualization and Teams-Games-Tournaments increase the social acceptance and self-esteem of handicapped students. (Madden and Slavin 1983; Slavin, 1983, 1984)

Special problems exist in educating learning disabled adolescents. These are addressed in chapters in the Gearheart (1981) and the Sabatino, Miller, and Schmidt (1981) books. Two additional sources of information on the topic are an article by Lefstein (1984) published by the Center for Early Adolescence at the University of North Carolina at Chapel Hill and a book by Kronick et al. (1975) entitled *What About Me: The Learning Disabled Adolescent.*

Not only the teaching techniques but also the setting in which the child is taught must be considered in determining an appropriate program. Sabatino, Miller, and Schmidt (1981) discuss typical classroom arrangements for providing services to learning disabled students. Depending upon the severity of the disability, the student may be placed in a self-contained special class or may remain in the regular class with supportive services. The student who is placed in a self-contained special education class receives intensive specialized help. The class size is smaller than that of the regular class, and the teacher has been trained to work with handicapped students. Many students in self-contained special classes attend some regular classes, either in academic areas in which they perform particularly well or in nonacademic areas such as music, art, or physical education. In this way, they spend at least part of the school day with their nonhandicapped peers.

Students who remain in the regular class may attend a resource room on a regularly scheduled basis. The amount of time spent depends upon the child's individual needs, but usually consists of at least 20 minutes a day, three days a week. In the resource room, the student receives individual or small-group instruction from a teacher trained to work with handicapped students. In addition to directly instructing the student, the resource room teacher should coordinate with the regular class teacher, sharing information and providing assistance in selecting the best methods and materials to use with the student.

Some students may not need to spend any time outside of the regular classroom. With the help of a consulting teacher, who is a specialist in learning disabilities, the regular class teacher may be able to provide the additional help the student needs. In fact, some educators have proposed that the separation between special and regular education programs is no longer necessary. Reynolds and Wang (1983) and Stainback and Stainback (1984) have proposed that the two organizational structures be merged and that staff roles be redefined so that regular class teachers are provided the support of special education and other specialists in their efforts to instruct all students, both handicapped and nonhandicapped, in regular classes. In this way, students would not need to be labelled in order to receive special services.

Chalfant, Van Dusen Pysh, and Moultrie (1979) have proposed that within the existing structure, teacher assistance teams be established to encourage providing instruction in regular classes. This system has been successfully implemented in 15 schools in Arizona, Nebraska, and Illinois. Three regular classroom teachers are elected to function as a day-to-day problem solving unit for regular teachers. The team responds to a teacher's request for assistance with a particular student who has a learning or a behavior problem. In conjunction with the teacher and often the child's parents, the team devises a plan of action. The team then provides the teacher with the support needed to implement the plan.

No matter what approach is taken

by the school system, a good program is always tailored to the individual needs of the child. Parents who are familiar with the various possible approaches are in a better position to make suggestions during the development of the child's individualized education program, monitor implementation of the program, and make suggestions if the program is not effective. Working cooperatively with the schools, parents can help ensure that their learning disabled child receives an effective educational program.

> "Training in appropriate social and independent living skills can help prepare a learning disabled young adult to function successfully in the world of work."

## What Happens to Young People with Learning Disabilities After School?

Over the past several years, there has been a growing awareness of the difficulties encountered by young people with disabilities in making the transition from school to work. There has also been a gradual recognition in the same period that many learning disabled young people do not "outgrow" their disabilities. In fact, they face long-term challenges in finding suitable work and in living independently. A body of literature written by professionals and consumers addresses issues of concern to learning disabled young adults and their parents.

An overview of the problems of transition is provided in the National Information Center for Handicapped Children and Youth's (NICHCY's) publication *When Handicapped Children Grow Up* (Smith-Davis, 1983). A personal view is provided by two learning disabled persons who have written about their own experiences. Dale Brown has written extensively and several of her publications are listed in the bibliography at the end of this article. Colin Ruffner wrote two articles for *Disabled USA*. The first was written at age 16 after he had dropped out of school and the second at age 18. By then he had passed his high school equivalency exam, and was a student at a community college. His father Robert Ruffner, who is Director of Communications for the President's Committee on Employment of the Handicapped, wrote accompanying pieces for both articles, describing Colin's experiences from his parents' point of view.

To successfully make the transition to independence, many learning disabled young people need assistance with social skills. Several programs have been designed to teach such skills. One is *Good For Me*, a 10-15 hour course developed by the Minnesota Association for Children and Adults with Learning Disabilities. An instructor works with eight learning disabled students and two or three learning disabled adults, who serve as role models. Question and answer sessions encourage the students to explore their feelings and to develop skills in monitoring their own behavior. Materials for the course include an eight chapter student guidebook and a leader's manual with detailed directions.

ASSET is a social skills program for adolescents developed at the University of Kansas. The program, which uses behavior modeling techniques, consists of eight video cassettes or films plus a leader's guide and program materials. Each video cassette demonstrates and explains a particular skill such as giving positive or negative feedback, resisting peer pressure, following instructions, and engaging in a conversation. After watching the program, a group of teenagers, under the guidance of an instructor, role play similar situations and provide each other with feedback.

Another program incorporating social skills training is *The Life Skills Training: A Program for Parents and Their Learning Disabled Teenagers* developed by the Parents' Campaign for Handicapped Children and Youth. The program provides a joint learning experience for adolescents and their parents in two five-hour workshops held one week apart. Training is provided on such topics as parent-teen collaboration, support networks for parents and teens, learning and practicing task analysis and problem-solving skills, taking inventory of the teen's daily living and social skills needs, and improving parenting skills.

In addition to social skills training, learning disabled persons often need training in how to carry out practical daily living activities such as reading bus schedules, shopping, preparing meals and managing money. Project Independence, a project conducted by the Monroe County (New York State) Association for the Learning Disabled, provided such training to 15 learning disabled adults who had previously failed to achieve independence despite intensive school and community services. Project staff worked with the clients in their homes and in community settings, such as banks and stores, over a period of 48 weeks. After the training, which included sessions with parents, a substantial number of the group members were able to live independently in their own apartments, needing only two to four hours of support a week from a trained worker. The project is described in the July-August 1983 issue of the New York Association for the Learning Disabled's publication *The News*.

Independent living training is also provided by 120 Independent Living Centers funded by the U.S. Department of Education's Rehabilitation Services Administration. A list of these centers and their locations is available from NICHCY.

Training in appropriate social and independent living skills can help prepare a learning disabled young adult to function successfully in the world of work. Specific help in finding employment is also available. In

1981, the Rehabilitation Services Administration added learning disabilities to its lists of recognized disabilities, thus making vocational rehabilitation more readily available to persons with learning disabilities. Since then, some vocational rehabilitation offices have developed programs especially for learning disabled job seekers. For example, the Virginia Department of Rehabilitation Services has received a grant from the National Institute of Handicapped Research to work with the Woodrow Wilson Rehabilitation Center Foundation and the Special Education Department of James Madison University to improve vocational rehabilitation services for learning disabled adults. Applications for services are available to both residents and nonresidents of Virginia through their local rehabilitation office.

DeKalb County, Alabama, has developed a model program, using early job placement to train learning disabled adolescents. The program is described in *Rehabilitating Learning Disabled Clients: A Model Program for Adolescents* (Frith, 1984).

An example of a program developed privately is the Hilltop Learning Center in Grand Junction, Colorado. The program provides services from infancy through adulthood on a fee-for-services basis, with some financial assistance available. Vocational and career guidance are among the services offered by Hilltop. Programs are tailor-made for the client and delivered one to one by trained personnel. Support groups for young adults, adults, and families are also available.

Dale Brown's (1982) *Rehabilitating the Learning Disabled Adult* gives examples of problems learning disabled persons have on the job and the help they can receive through state vocational rehabilitation offices. A synopsis of the literature written from 1969 to 1982 on vocational rehabilitation for learning disabled adults is provided in *Rehabilitation and Adults with Learning Disabilities* by Szuhay and Williams (1983). The reviews are organized according to the following topics: legislation and regulations; characteristics of learning disabled individuals; assessment; vocational evaluation, training, and placement; and vocational rehabilitation.

Thus, as the needs of learning disabled young adults making the transition from school to work have been recognized, programs have been developed to help meet those needs. Programs currently exist to teach needed social, independent living, and vocational skills. These can be important resources for learning disabled persons and their parents as they meet the challenges of adulthood.

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## RESOURCES

For additional information on the vocational rehabilitation project for the learning disabled being conducted by the Virginia Department of Vocational Rehabilitation, Woodrow Wilson Rehabilitation Center, and the Special Education Department of James Madison University write to: R&D Project for LD, Box 125, WWRC, Fisherville, VA 22939, (703) 885-9808.

For additional information on the program conducted by the Hilltop Learning Center, please write: Hilltop Rehabilitation Hospital Learning Center, 1100 Patterson Rd., Grand Junction, CO 81501.

# How Can Learning Disabled High School Students Prepare for College?

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The following article is by the authors of *College and the Learning Disabled Student*, 1984 (Grune & Stratton, Inc., Orlando, Florida 32887-0018, $24.50) and *Peterson's Guide to Colleges with Programs for Learning Disabled Students* (Peterson's Guides, PO Box 2123, Princeton, NJ 08540).

Increasing numbers of learning disabled high school students are planning to enter college. However, learning disabled students often graduate from high school with an insufficient background for college English, mathematics, science, and social studies. They lack study skills and have residual deficits in reading, writing, spelling, and spoken language. These deficits are compounded by their lack of understanding of their learning disabilities.

In this article, we offer recommendations to high school personnel for preparing qualified learning disabled students for the college experience. Implementation of these recommendations will help ensure that learning disabled high school students enter colleges best suited for their needs, make maximum use of resources available at the colleges, and become independent learners at their earliest possible point in their college experience.

**Recommendations for Counseling Learning Disabled Students**

High schools must provide counseling as a normal part of their services to all learning disabled students. Learning disabled students with college aspirations should be counseled regarding their potential for college. Those with college potential should be given information on college programs and assisted in selecting and gaining admission to specific colleges. Here are recommendations high school counselors can follow when providing assistance to college-bound learning disabled students.

- **Help learning disabled students to realistically assess their potential for college.** It is important to determine if learning disabled students have the ability for college studies. Sometimes as a result of success experienced in high school learning disabilities programs, these students develop inflated perceptions of their cognitive abilities. As a result, they may erroneously believe they can succeed in college. High school counselors must help learning disabled students to compare their abilities with those of non-learning disabled, college-bound high school students. As a result of this comparison, learning disabled students will be able to make realistic decisions as to whether or not they should pursue a college education.

- **Provide information on learning disabilities college programs.** Information on learning disabilities college programs is only now becoming available. Most high school counselors are unaware of directories that identify colleges with such programs. High school counselors need to obtain copies of these directories and become familiar with the nature and location of the college programs. They should contact program directors to learn what the programs offer to the high school learning disabled students with whom they work. Finally, they must share the information with the students and their parents/guardians. Here are three resources high school counselors should have on their shelves to assist learning disabled students:

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Counselors, parents and students will also find helpful information available from Higher Education and the Handicapped (HEATH), 1 Dupont Circle, Washington, D.C. 20036. They will have a toll-free number in late Spring. Call 800-555-1212 for information.

- **Help students and parents/guardians select learning disabilities college programs.** Counselors must be very careful when assisting learning disabled students to select college programs. While some colleges provide special programs designed to help learning disabled students, others suggest they do but actually provide little more than the services available to all college students. It is important that learning disabled students and their counselors verify that programs claiming to meet the needs of these students actually do so. Our examination of the services offered by comprehensive learning disabilities college programs leads us to believe that the following questions should be used for this verification:

a. Is diagnostic testing used to generate an individual educational plan (IEP) for providing services?

b. Is the program staff trained to work with learning disabled students?

c. Do college faculty members support the efforts of the program? How?

d. Does the program provide for remediation of deficits in reading, writing, spelling, and mathematics?

e. Does the program provide tutors to assist students in mastering the content of their college courses?

f. Does the program provide taped textbooks?

g. Are provisions made for notetakers or for taking class notes using tape recorders?

h. Can arrangements be made to take course examinations in alternative ways?

i. Is individual or group counseling available?

- **Encourage students to apply early.** Learning disabled high school students need to begin thinking about college in their sophomore year. Most learning disabilities college programs admit qualified students on a first come, first served basis. The admission process takes considerable time; consequently, if students wait too long they are apt to find themselves at the end of a very long waiting list. Program directors suggest that students make formal application to these college programs during their junior year. High school counselors must encourage students to apply early, help them gather information, and complete application forms.

- **Prepare students for the college admission interview.** An important part of the admission procedure for learning disabilities college programs is a personal interview. Learning disabled students have very little experience participating in interviews. As a result, there is a danger that they will not present themselves in a representative manner. To assist these students in accurately portraying themselves, high school personnel can conduct mock interviews with the students asking the types of questions the students are likely to be asked during an admission interview. From our discussions with learning disabilities college program directors and an analysis of application forms we have identified questions that might be asked during an interview:

1. Why do you want to attend college?
2. What do your parents think about your going to college?
3. What would you like to major in?
4. What are your plans after college?
5. What type of a person are you?
6. What type of learning disability do you have?
7. How does your learning disability affect you?
8. What are your academic strengths and weaknesses?
9. What things are easy for you to learn?
10. What things are difficult for you to learn?
11. What has helped you to learn in the past?
12. What help do you need from our program to make it in college?
13. Are you prepared to spend extra time and effort to make it in college?

### Recommendations for Instruction of Learning Disabled Students

Most non-learning disabled students entering college have the basic content area information, study skills, and learning strategies to be successful. This is not true for learning disabled students entering college. These students must be helped to develop the skills and strategies they will need to succeed in college. It is important that instruction be provided by specialists. In some cases learning disabled high school students receive content-area instruction from learning disabilities teachers who are not certified or trained in specific content areas. This staffing pattern reduces both the quantity and quality of information to which learning disabled high school students are exposed in the important areas of English, mathematics, science, and social studies. It is important that college-bound learning disabled students receive their content-area instruction from teachers who are trained specialists interested in meeting the special needs of these students.

Here are recommendations high school teachers can follow when working with college-bound learning disabled students.

- **Provide college-type assignments.** College-bound learning disabled high school students need experience with assignments similar to those they will encounter in college. It is important that they be required to do such things as write research or term papers, make oral reports, read novels, prepare book reviews, and complete other independent projects. It is unrealistic to expect that these students will be able to do such things in college without extensive instruction and practice while in high school.
- **Prepare learning disabled students to function independently.** As college-bound learning disabled students progress through high school they must be given increasing responsibility for meeting requirements and resolving problems on their own. Many learning disabilities college program directors report that their students are overly dependent on program staff as a result of a history of excessive assistance from teachers, parents, and/or siblings and participation in overly structured and supportive high school learning disabilities programs. The most impressive learning disabled college students are those who can assume responsibility for their own lives after some initial assistance through the learning disabilities college program.
- **Teach textbook reading strategies.** Many learning disabled college-bound students have a difficult time reading textbooks. They can be helped to develop this crucial college skill by teaching them to use textbook reading strategies. Robinson (1974) suggested the use of the SQ3R study strategy for reading social science text material, and Spache (1963) recommended the PQRST study strategy for reading physical science text materials. These and similar strategies will help learning disabled students to achieve higher levels of comprehension and retention from their textbooks.
- **Teach graphic skills.** College texts contain many graphs, tables, charts, diagrams, flow charts, and maps. These graphic aids are used by textbook authors to explain facts and trends more simply than can be done with text discourse. High school teachers need to ensure that learning disabled college-bound students possess the necessary skills to use and understand the graphic material in their textbooks.
- **Teach study skills.** Success in college requires that students have highly developed study skills. College-bound learning disabled students must be taught how to take notes efficiently and accurately from lectures and textbooks. They must also be taught how to prepare outlines, write reports, proofread, and memorize facts.
- **Teach how to organize for learning.** Directors of learning disabilities college programs frequently indicate that their students do not know how to handle their unscheduled time. High school teachers must show these college-bound students how to prepare schedules that allow time for both study and fun. These students also need to be shown how to arrange their home and school study areas for maximum on-task behavior. Further, they should be shown the value of working with study partners as a strategy for monitoring and completing assignments.
- **Teach the use of instructional aids.** Learning disabilities college programs typically provide a variety of instructional aids to help students compensate for their learning difficulties. Students can make optimal use of these instructional aids in col-

lege if they are exposed to them in high school. Therefore, college-bound learning disabled students should be taught to use tape recorders to record lecture notes, taped textbooks to assist them with reading assignments, and typewriters or word processors to facilitate their performance with written assignments.

- **Teach how to prepare for and take tests.** Most college courses include quizzes and examinations in a variety of forms. College-bound learning disabled students need to be taught how to organize and study for quizzes, midterms, and final examinations. They must also be taught how to take multiple choice, essay, and CLOZE type tests since these are the most common forms of tests used by college instructors. (In CLOZE type tests, every fifth, seventh, or ninth word is deleted in the printed discourse; the student must fill in the blanks.)

**Conclusion**

More and more colleges are opening their doors to qualified learning disabled students. High school counselors and teachers play a crucial role in helping these students enter and succeed in college. These professionals must do everything possible to help learning disabled students learn what is needed and make it in college and to equip them with the necessary skills and knowledge to accomplish what is required for success. The recommendations we provide in this article will enable counselors and teachers to help learning disabled students participate in this new and exciting educational opportunity.

## REFERENCES

Robinson, F.P. *Study skills for superior students in school* (2nd ed.). NY: Macmillan, 1974.

Spache, G.D. *Toward better reading*. Champaign: Garrard, 1963.

The preceeding articles focused on information parents need to know in order to work towards effective programs for their children. The next article is included to illustrate what parents are able to accomplish when they are properly informed.

## Changing the Law for College Admissions for Learning Disabled Students: Parent Power

"No resident of the commonwealth who has been diagnosed as being developmentally disabled, including but not limited to, having dyslexia or other specific language disabilities, by any evaluation procedure prescribed by chapter seventy-one B, or equivalent testing, shall be required to take any standardized college entrance aptitude test to gain admittance to any public institution of higher education in the commonwealth. Admission shall be determined by all other relevant factors excluding standardized achievement testing."

"Since this legislation many private colleges and universities have also waived SAT scores, upon request and with documentation, for learning disabled students with solid high school records."

On August 8, 1983 the above legislation (Chapter 344) of the General Laws of Massachusetts) was signed into law. This action, the first such in the United States, was a giant step forward in curbing discrimination against disabled students and in opening the doors of higher education to all able college-bound individuals. Since this legislation many private colleges and universities have also waived SAT scores, upon request and with documentation, for learning disabled students with solid high school records.

What prompted such legislation? As the person who was responsible for the drafting of Chapter 344, I will be happy to share with you some of the background. I am a teacher by profession and the mother of three highly-motivated children, two with learning disabilities. One snowy morning in January of 1983, I was reading an article in a Boston paper which stated that the Board of Regents of Higher Education in Massachusetts planned to impose cut-off SAT scores for students who wished admittance into our state colleges or universities. I immediately thought of the learning disabled students I've worked with as an educator, and, of course, of my own children. I realized that a great injustice was taking place. What was going to happen to all of the average-to-bright, highly-motivated, learning disabled individuals, who, because of special programs and help throughout elementary school and secondary school, had met with success in spite of great odds, but who, because of a disability do not test well? My concern was so very great that I began to make many telephone calls throughout the state and nation on this issue. I learned that research had not ascertained that SATs, either timed or untimed, are valid measurements of future college success for such students. I was informed that SATs and similar testing tended to test the disability of these students, rather than their potential. This indeed seemed discriminatory! Did I want my children, or others, because of a learning disability, to have college doors closed to them by test scores that, for this group, had not been found to be valid? Of *what* value are invalid test scores? Many learning disabled students have low SAT scores but much potential. Using their high school records and teacher and guidance recommendations is a much more reasonable method of evaluation. May I use as an example one learning disabled student in Massachusetts who had SAT scores of approximately 330 and 440, but did not submit these scores and was accepted on the basis of a solid high school record and recommendations into a very competitive program at one of our universities. At the conclusion of the first semester this student had a 3.25 average.

Others joined in the battle to protest the rights of the learning disabled student. A child advocate by the name of Angelica Sawyer offered to organize a task force. Dr. Walter Haney, whose field is research and testing at Harvard, Boston College, and Huron Institute, and Mary M. Chatillon, Director of Reading Disabilities at Masssachusetts General Hospital were a part of our task force. We were blessed with a group of dedicated and knowledgeable individuals; without their help Chapter 344 would not have been possible. There was no opposition along the way with the exception of the Board of Regents of Higher Education in Massachusetts. They did not appreciate a grass-roots effort overriding their authority, and recommended that the Governor veto the bill at the last minute. To our surprise, Educational Testing Service appeared at the hearing before the Joint Committee on Education to testify in favor of our legislation. It was at this same time, in Committee, that the wording was changed; "developmentally disabled" was added. College Board requested that I be on an Advisory Task Force on Testing Services for Handicapped Students. On August 9, 1983, one day after Chapter 344 was signed into law by Governor Michael Dukakis, I traveled to New York City to serve on this task force. Our new law was presented to them at that time.

Chapter 344 has forced the Board of Regents of Higher Education and the entire post-secondary system in Massachusetts to reexamine their admission procedures with regard to the disabled Support services and foreign language requirements are also being reviewed. Angelica Sawyer and I were recently part of a task force formed by the Board of Regents of Higher Education in Massachusetts to address the needs and concerns of the learning disabled student at the post-secondary level.

Chapter 344 has opened important doors, but there is still much more to be done. We can all be quite proud of the work being accomplished at the elementary and secondary levels, but there is still much to be addressed at the post-secondary level. After participating in a workshop at the spring meeting of the New England Orton Dyslexia Society, I realized what a great need exists in helping able, learning disabled students prepare to enter college. Because of this, I am now a private consultant to those students and to their school systems throughout the state. Hopefully, the day will come when my services are no longer needed.

Exciting changes are, because of Chapter 344, beginning to take place in Massachusetts. It greatly concerns us that individuals in other states across the country do not, at present, have the same opportunities. This discrimination touches *all* disabled students throughout the United States, not just those in Massachusetts. Won't you please consider opening the doors of higher education in your state to able, disabled students whose test scores may otherwise prevent that opportunity? These students desperately need your help. We could only legislate for the state schools in our state. You, each of you, must take the ball from here. If I can be of any assistance to you, please feel free to contact me, Mrs. Joen Kauer Blanton, at 27 Ivy Lane, Sherborn, MA 01770 (telephone 617-653-5112.)

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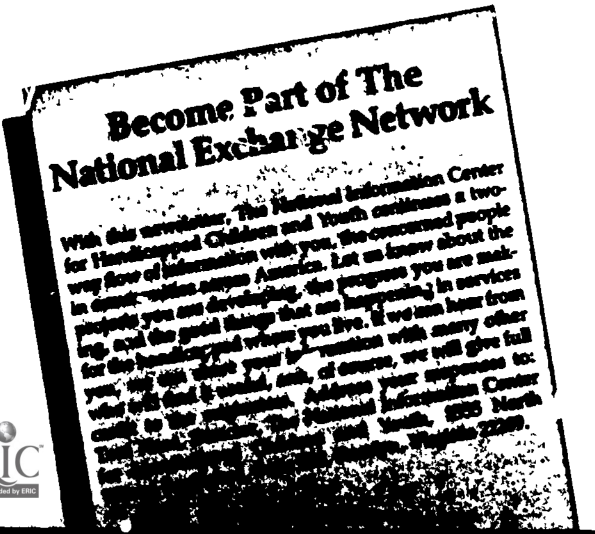

## Become Part of The National Exchange Network

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News Digest

Information from the
National Information Center for
Handicapped Children and Youth

OCTOBER 1985

## Psychological Testing of Children with Disabilities

Children with handicaps who are in need of special education services must be identified through an assessment process. The letters received by the National Information Center for Handicapped Children and Youth indicate that psychological testing, an important part of the assessment process, is a topic about which parents want more information. The purpose of this edition of *News Digest* is to provide parents and others concerned about the needs of children with handicaps with an introduction to testing and an overview of literature that will allow them to do further research on the subject.

There are certain things that parents should bear in mind from the beginning of the testing process. The purpose of testing is to understand the nature of the child and to provide guidance for decisions about the kind of educational programming the child will receive. Stanley D. Klein in *Psychological Testing of Children: A Consumer's Guide* compares psychological testing to the kind of sampling a cook does when cooking stew. The cook tastes the stew to make a generalization about how well the dish is turning out. In the same way, samples of behavior gotten through psychological tests allow psychologists to make generalizations about a child's behavior. No test or group of tests can provide a complete picture of a child's development. Klein cautions against basing decisions about a child's education on the results of a single test. Children undergoing assessment should be given a group (sometimes called a battery) of tests.

Legally, the assessment process must consist of information from a variety of sources. The child must not only be given tests but must also be observed working and playing in natural settings. People who know the child must be asked to provide information about him or her. The views of parents are especially important. Only through a variety of sources can an adequate picture be obtained of the child's strengths and weaknesses. Together, this information can be used to determine whether the child needs special help, and, if so, to design an appropriate program.

The way tests are administered is also important. If the results of the test are to be useful, the child's performance on the test should be representative of his/her behavior. The person giving the test should make sure the child is comfortable in the testing situation. If necessary, adaptations must be made to ensure that a child's physical or sensory disabilities do not interfere with the testing of a child's aptitudes. Public Law 94-142 requires that tests be conducted in a way that prevents physical or sensory impairments from interfering with the measurement of a child's aptitudes. The law also requires that diagnostic tests be given in the language and mode of communication a child understands. It is also important in administering tests that the psychologist observe the way in which the child responds to questions. Klein points out that how a child approaches problems can be as revealing as the answers that the child gives to specific questions.

Parents have an important role to play in the testing process. As an active participant in the planning of their child's educational program, they should feel free to ask questions about the techniques being used to assess their child. The person giving the test should be able to tell the parent what information the assessment is trying to uncover. "The Role of Parents in the Assessment Process" (1983) makes several suggestions on how parents can become more involved in the assessment process. It is important that parents meet with the person conducting the test before the testing takes place. This gives the parents an opportunity to ask any questions they may have. Such a meeting also allows the person giving the test an opportunity to ask about the parents' views on the child's development. Parents also should prepare the child for the assessment process. Testing may make some children anxious. This is particularly so if the child has been identified for testing because of poor school performance. Such anxiety can interfere with a child's performance on the test. Professionals should take extra care in explaining the results of tests to parents.

## Key Concepts in Psychological Testing

Both Klein in the work previously cited and David L. Wodrich in *Children's Psychological Testing: A Guide for Nonpsychologists* provide an introduction to the concepts of psychological testing. The following is a brief survey of important ideas that parents and others need to understand in order to determine the usefulness of psychological testing.

One goal of psychological tests is to find out how the child performs compared to other children of the same age. In order for this comparison to be meaningful a valid norm group must be defined. A norm group is a large number of children who are representative of all of the children in that age group. Such a group can be obtained by selecting a group of children that have the characteristics of children across the United States, that is, a certain percentage must be from each gender; from various ethnic backgrounds (e.g., white, black, American Indian, Asian, Spanish-speaking); from each geographic area (e.g., Southeast, Midwest and so forth); from an urban, rural, or suburban area; and from each socioeconomic class (usually determined by the father's occupation). Not all tests use large, representative norm groups. Before making assumptions about a child's abilities based on test results, it is necessary to know something about the group to which the child is being compared.

It is also necessary to know whether the tests are reliable and valid. A test is valid if it measures what it claims to measure. For instance, if the test is supposed to measure intelligence, there should be a definition of intelligence. It is reliable if a person who takes it more than once obtains nearly the same score each time. Wodrich describes the scientific methods used to determine whether or not a test is valid and reliable. For example, if a test claims to measure anxiety, a person's scores should be higher under a stressful situation than under a nonstressful situation.

Another consideration is the experience and skill of the person giving the test. As mentioned earlier, the examiner needs to be able to make the child feel comfortable with the testing situation so he or she can concentrate on the task at hand. At the same time the examiner must use uniform procedures, presenting each item in the same way to each child. Without uniform procedures, it would be impossible to know whether differences found among children were due to differences in their development or to the different procedures used.

An understanding of how standardized tests are scored is necessary to making sense of the results. The first score is the raw score. Raw scores are usually the number of "correct" answers. The raw score is then changed to a derived score, which shows how the child's raw score compares with the raw scores of the norm group. This comparison can be provided in several ways: (1) An age or grade equivalent means that the child scored the same as other children of a particular age or grade level. For example, a score of 5.3 means that on a particular test the child scored the same as other children in the third month of the fifth grade. (2) Percentile ranks indicate what percentage of the norm group was exceeded by the child. For example, a derived score of 35% means that the child scored better than did 35% (or 35 out of 100 students) in the norm group. (3) A standard score shows how far below or above the average score of the norm group the child's score is. A standard score provides information about where the child stands in relation to the norm group.

Many psychological tests include a series of subtests. Analysis of these subtests can provide more information than is available from the overall derived score. The child's scores on the subtest show whether the child can perform equally well in all areas tested (e.g., reading, arithmetic) or is stronger in one area than in another. Even more detailed information can be gained by examining the pattern of answers on each subtest.

A child's response to items can provide information about his/her learning style. For example, some children understand information better if it is read out loud to them; others, if they can read for themselves. These differences will affect their test scores and should be noted by the person administering the test. Such information can later be used in designing an educational program most suitable to a child's learning style.

Before a test is given, the reason for giving it must be known. There are many tests available and choosing the right ones depends upon the nature of the problem. Thus the more detail that can be provided about the child's behavior and the possible reasons for it, the better a psychologist is able to choose the appropriate tests to administer.

In summary, Klein and Wodrich both provide information to help parents and others to better understand psychological testing. To determine the usefulness of test information, it is necessary to know the following: (1) How do test results compare with other information gained from observation of the child in natural settings? (2) Who is the child being compared to? (Did the test makers use an adequate norm group?) (3) Does the test measure what it claims to measure? (Is it valid?) (4) Would the results be the same if the test were taken more than once? (Is it reliable?) (5) Is the person giving the test well trained and responsive to the child being tested? (6) Has the test been given according to standard procedures? (7) How is the test scored, and have the results been interpreted carefully? (8) Has the right test been given?

## Test Types

The literature reviewed for this paper focused on four types of tests commonly used in assessments of children with handicapping conditions: infant development scales, intelligence tests, special abilities tests, and personality tests.

## Infant Development Scales

Because early intervention can help handicapped children reach their fullest potential, it is important that handicapping conditions be identified as soon as possible. Several tests have been constructed to compare an infant's developmental level with the expected level for his or her age group. These tests have not been very successful in predicting how well the child will function in the future, but they do identify children who are "at risk." Infants so identified can be monitored so that any future delays in development can be identified quickly and an intervention program can be designed, if needed. In Chapter 3 of his book, Wodrich reviews some of the more commonly used infant scales. These include:

- *The Brazelton Neonatal Behavioral Assessment Scale*, which tests an infant's (1) neurological intactness, (2) interactive behavior (including motoric control such as putting the thumb in the mouth and remaining calm and alert in response to stimuli such as a bell, a light, and pinprick), and (3) responsiveness to the examiner and need for stimulation.
- *The Bayley Scales of Infant Development*, which test mental abilities including memory, learning, and problem-solving behavior; motor skills; and social behaviors such as social orientation, fearfulness, and cooperation.
- *The Gesell Developmental Schedules*, which test for fine and gross motor behavior; language behavior; adaptive behavior including eye-hand coordination, imitation, and object recovery; and personal-social behavior including reaction to persons, initiative, independence, and play response.
- *The Denver Developmental Screening Test*, which is used to suggest problems which should be more carefully evaluated later. It measures four areas: personal/social, fine motor/adaptive, language, and gross motor skills.

In addition to these tests which are discussed in detail by Wodrich, Klein mentions the *Cattell Infant Intelligence Scale*, the *Kuhlmann Binet*, and the *Griffiths Mental Development Scale*. Sources for tests designed to be used with infants with specific handicapping conditions will be provided in a later section.

## Preschool and School-Age Intelligence Tests

Most children who are tested for a handicapping condition will be given an intelligence test (IQ test) as part of the assessment process. Klein states that in general IQ tests define intelligence as having two attributes, the "ability (1) to learn from experience, and (2) to solve problems" (p. 22). IQ test scores reflect an interaction between a child's natural abilities and his or her life experiences. A child's score may change over time, especially if the test is given at a young age. One reason is that the nature of intelligence changes as a child matures, with older children being expected to use abstract reasoning not expected of younger children. Another reason is that such stressful life experiences as parents getting a divorce can temporarily make a child less motivated to learn and thus may temporarily lower his or her IQ scores; on the other hand, such positive life experiences as being placed in an appropriately challenging educational program can increase a child's scores. However, by age 8 most children's IQ scores will be close to those they will have as adults.

Both Klein (1977) and Wodrich (1984) review the two most commonly used IQ tests—the *Stanford-Binet* and the *Wechsler*. Wodrich describes the tests in detail and gives examples of test items. Klein provides an easy-to-understand explanation of how the tests are scored. For both tests, a score of 90 to 109 is normal or average, meaning that half the people taking the test will score in that range. A lower score is below average and a higher one is above average.

The *Stanford-Binet* can be used with both preschool and school-age children and is usually administered to children between the ages of 2 and 8. Examples of what is required include remembering where an object was hidden, building a four-block tower to match an existing tower, explaining the uses of common objects, and identifying by name pictured objects. One disadvantage of the *Stanford-Binet* is that it gives only an overall score, assessing general thinking and problem-solving ability and does not provide subtest scores about particular strengths and weaknesses. Some items are culture-specific so the test is best suited for middle-class English-speaking children. It may not provide a fair assessment of bilingual or bicultural children. Depending upon the child's age, the test requires vision, eye-hand coordination, hearing and speech.

The *Wechsler* has separate forms for preschool and school-age children. The preschool form is called the *Wechsler Preschool and Primary Scale of Intelligence* (WPPSI), and the school-age form is called the *Wechsler Intelligence Scale for Children—Revised* (WISC-R). The *WISC-R* is the test most likely to be used to assess the cognitive functioning of school-age children. It has six verbal and six performance subtests. In each case, five tests are always administered and the sixth is optional.

Some examples of items similar to but not exactly the same as *WISC-R* items are provided by Wodrich. For the verbal scales these include the following: "During what month is Christmas?" "How are a river and a lake alike?" "If four doughnuts cost 60 cents, how much would six doughnuts cost?" "What is a cow?" "What are some reasons why we should not steal?" For the performance scales, the child is asked to identify a missing element in a picture of a common object (the picture might show a baby carriage with a wheel missing), to arrange a series of scrambled pictures into a logical story, to reproduce the design of several blocks, to rearrange pieces of an object to make a picture, and to copy symbols associated with specific marks or numbers. The verbal scales are read orally to the child, who answers orally. The performance scales require the child to physically manipulate objects.

Wodrich also describes the *McCarthy Scales of Children's Abilities*, an intelligence test designed for children 2½ to 8 years old. It has a cognitive index made up of three subtests: verbal, perceptual/performance (nonverbal thinking and problem solving), and quantitative (number knowledge and reasoning). It also contains a memory and a motor index. The perceptual/performance subtest can be used with preschool children who are bilingual, bicultural, or have specific language or visual problems. The test is preferred to the *Stanford-Binet* if a child within the specific age group is thought to be learning disabled. It should not be used with children who are severely retarded. Other preschool-age tests mentioned by Klein are the *Merrill-Palmer Scale* and the *Minnesota Preschool Scale*.

## Problems with IQ Tests

Both handicapped and minority children with normal intelligence may receive below normal scores on intelligence tests. One reason is that norm groups often consist entirely of white middle-class, nonhandicapped students. Even when minorities and handicapped students are included in the norm group, because they are included in comparatively small numbers, the children are still primarily being compared to nonhandicapped and nonminority children. Another reason is that many test items require familiarity with middle-class values and experiences. Children who do not have such experiences may obtain a lower score for reasons other than their intelligence. Even items that appear on the surface to be nonbiased are not necessarily so. For example, a child who plays every day with blocks similar to those used in the *Stanford-Binet* block-building task is likely to do better on the task than a child who has never played with blocks. Similarily, a child with normal intelligence who has eye-hand coordination problems will have trouble with the block-building task, but for physical rather than intellectual reasons.

A review of the issues involved in nondiscriminatory testing is provided by Chinn and Kamp (1982). They also describe the *System of Multicultural Pluralistic Assessment* (SOMPA), a test based on the *WISC-R*, which was designed to take into account a child's handicapping condition and sociocultural background and thus to be nondiscriminatory. Duffey, Salvia, Tucker, and Ysseldyke (1981) review the various approaches such as the *SOMPA* that have been used to make intelligence testing less biased and discuss the problems associated with each. They believe that the solution lies in abandoning the use of labels such as mentally retarded, emotionally disturbed, and learning disabled and instead assessing levels of skill development. The results of a test would then provide information directly applicable to designing an appropriate educational program for the child. To date, however, attempts to ensure fairness of testing have consisted of adapting existing measures and changing procedures to ensure that accurate and relevant information is obtained. For example, the Education for All Handicapped Children Act, the federal law protecting the educational rights of handicapped children, requires that more than one procedure be used to determine the child's educational program, that the evaluation be made by a multidisciplinary team including a person knowledgeable in the area of the suspected disability, and that the child be assessed in all areas related to the suspected disability. The full requirements of the federal law can be obtained by writing the National Information Center for Handicapped Children and Youth (NICHCY), P.O. Box 1492, Washington, DC 20013.

## Special Abilities Tests

In addition to IQ tests, there are special abilities tests. Such tests can provide valuable information prior to a full-scale evaluation or can add to information obtained from an IQ test. Special ability tests should be chosen carefully and should never be used alone as a measure of intelligence. Many are available, not all are useful. Wodrich describes three such tests in detail and provides a summary of several others in an appendix.

- *The Bender Visual Motor Gestalt Test* is used to assess visual perceptual skills and eye-hand coordination. The child is given nine geometric figures, one at a time, and asked to copy them.
- *The Peabody Picture Vocabulary Test* assesses familiarity with vocabulary words without requiring the child to speak. The child is shown four pictures at a time and must point to (or otherwise indicate) the one that corresponds to the word the examiner says. Part of the reason the test was originally designed was to be used with children who are nonverbal, mentally retarded and/or have cerebral palsy.
- *The Detroit Test of Learning Aptitude* measures auditory and visual memory and concentration.

Klein (1977) briefly describes the *Draw-a-Person* or *Draw-a-Man* test, the *Leiter International Performance Scale*, the *Columbia Mental Maturity Scale*, and the *Ravens Progressive Matrices* as special abilities tests that require fewer communications skills, and for the most part, less motor coordination than do the *Stanford-Binet* or the *Wechsler*. These tests do not, however, provide a complete picture of the child's abilities because they concentrate on specific skills.

## Personality Tests

Both Klein (1977) and Wodrich (1984) review the personality tests that can be used to help determine a child's emotional state. Klein provides an overview of the reasons that personality tests are included in the battery of tests taken by children with disabilities undergoing assessment. Personality tests provide an additional dimension to the picture that emerges from a psychological assessment. Tests of this kind provide the child with hypothetical situations based on real life. The response of the child to these situations allows the psychologist to gather information about the unique features of the child's personality. The results of personality tests should be considered in conjunction with the observations of those familiar with the child (particularly parents) and the results of other psychological tests. Generally there are two types of tests: objective and projective.

**Objective Tests**

Objective tests are pencil-and-paper tests containing several hundred items designed to determine the child's predominant personality traits or behaviors. Example items provided by Wodrich are: "I am often nervous," "Most days I feel discouraged," and "I often hit or destroy things when I am angry." The child or the child's parent indicates whether or not the statement is true. The test is scored by grouping together all of the items measuring a certain trait such as aggression or depression and comparing the child's score on these groups of items with the scores of a norm group.

The most well known objective test is the *Minnesota Multiphasic Personality Inventory* (MMPI), which was originally designed for use with adults but can also be used with adolescents. Separate adolescent norms are available and must be used in order for results to be meaningful. *The Personality Inventory for Children* (PIC) is one of the few objective tests for younger children.

**Projective Tests**

Projective tests provide the child with a stimulus such as inkblots, a set of pictures, or incomplete sentences, with the idea that the child's responses will reveal his or her unique view of the world, including issues of concern and emotional needs. Another type of projective test provides instructions for the child to draw a picture, again with the idea that the drawing will reveal information about the child's inner self.

The inkblot test is a series of nebulous shapes. The child's response to these shapes has been found to be related to his or her larger response to the world. For example, children who see only the small details in the inkblot instead of the whole shape may be overly concerned with small details in their daily lives. *The Rorschach Test* was the first inkblot test and the one still most commonly used. *The Holtzman Inkblot Technique* is another projective test that may substitute for the *Rorschach*.

Picture story tests consist of a series of pictures of people or animals in a variety of human situations. The child is asked to tell a story about each picture. In interpreting the results, the psychologist looks for themes in the child's response. For example, a child who is concerned about the illness of a sibling is likely to respond to many of the pictures with a story about illness. The most common picture story tests are the *Thematic Apperception Test* (TAT) and the *Children's Apperception Test* (CAT). Other picture story tests are the *Michigan Picture Test*, the *Tasks of Emotional Development Test*, the *Blacky Pictures*, and the *Make-a-Picture-Story Test*.

Completion tests consist of a series of incomplete sentences or stories, which the child is asked to complete. Examples of incomplete sentences are: "It makes me sad to—," "There are times when—," and "My mother should—." One example of a story completion test is the *Rosenzweig Picture Frustration Study*, which presents a frustrating situation in cartoon form. The statements of one character are left blank for the child to fill in.

Drawing tests require the child to draw pictures. In one such test the child is asked to draw a person and then to draw a person of the opposite sex. In another, the child draws a whole family; and in still another, a house, a tree, and a person.

Each of these tests can provide useful information about a child's needs and concerns. Each test, however, relies heavily upon the interpretations of a psychologist, and thus requires that he or she be well trained, experienced, and competent in using the particular technique. The tests must be interpreted cautiously and used only in conjunction with other sources of information about the child.

## Testing and Specific Handicapping Conditions

A number of authors discuss issues involved in testing children with specific handicapping conditions. Haring (1982) provides a section on assessment for each of the handicapping conditions discussed in his book. Other sources of information are provided in the following discussion.

**Mental Retardation**

An IQ score below 69 indicates that a child may be mentally retarded. However, a low IQ score in itself is not sufficient for a diagnosis. A child's adaptive behavior must also be measured. Adaptive behavior refers to a child's ability to carry out everyday living skills such as dressing, eating, washing, playing, functioning independently, and cooperating with others. Several instruments have been developed to measure age-appropriate behavior in such skills. These include the *Vineland Social Maturity Scale*, the *American Association on Mental Deficiency's* (AAMD), *Adaptive Behavior Scales*, and the *Adaptive Behavior Inventory for Children*. The first two are described by Wodrich (1984, pp. 67-72). Two further sources of information about adaptive behavior are Mulliken and Buckley (1983, pp. 53-89) and Sternberg and Adams (1984, pp. 53-89). Mulliken and Buckley provide a brief summary of 30 adaptive behavior instruments. Sternberg and Adams provide a more extensive review of 14 instruments.

Huberty, Koller, and Ten Brink (1980) review state definitions of mental retardation. They discuss the importance of measuring adaptive behavior and the need for uniform standards across states. The issue of adaptive behavior and nondiscriminatory testing is discussed in an article by Slate (1983). She reports the results of a research study that compared the use of the *Vineland*, the *Adaptive Behavior Inventory for Children*, and the *Behavior Rating Profile* with white and black children from four socioeconomic levels. *The Adaptive Behavior Inventory for Children* was shown to be the least discriminatory of the three instruments.

A low overall IQ score and a low overall score on adaptive behavior are still not enough evidence to label a child as mentally retarded. In addition, the child should show "significantly delayed development across all measured psychometric areas" (Wodrich, 1984, pp. 73). If the child is functioning well in one or two areas, his or her low scores in the other areas may be because of poor motivation, a specific learning disability, or another disability besides mental retardation. School-age children also need to be given an individually administered achievement test. A child who shows an ability to achieve well academically is not mentally retarded even if his or her other test scores are low.

### Learning Disabilities

Wodrich (1984) discusses assessment as it relates to learning disabled preschool (pp. 78-81) and school-age (pp. 110-119) children. Learning disabled children have disabilities in specific areas such as reading, writing, or arithmetic and because of these disabilities have lower achievement records than would be expected from their overall IQ score. At the preschool level the children are apt to have problems in either language or visual perceptual-motor functioning. The *WPPSI* and the *McCarthy* are better IQ tests than the *Stanford-Binet* for learning disabled preschool children because they provide information about the particular areas in which the child is having difficulty. School-age children should be given an intelligence measure such as the *WISC-R*, which measures overall ability and at the same time provides information about specific disabilities. They also must be given an individual academic achievement test to measure whether their achievement level is lower than expected based on their IQ score. Further sources of information about diagnosing learning disabilities are available in NICHCY's publication *News Digest (June, 1985)*. For a free copy, write NICHCY, P.O. Box 1492, Washington, DC 20013.

### Emotional Disturbance

Mulliken and Buckley (1983, pp. 197-201) and Garwood (1983, pp. 377-385) discuss some of the issues involved in testing emotionally disturbed children. Both authors point out that there is a close relationship between emotional and cognitive development and that children with emotional problems often also obtain lower than average IQ scores. Mulliken and Buckley state that the examiner must go to extra lengths to ensure a calm testing environment, that several short sessions rather than one long session may help the child perform to the best of his or her ability, and that providing variety in the situation, for example by sometimes talking softly and sometimes talking in a louder voice, may help the child stay on task.

### Hearing Impairment

By the nature of their disability, children with hearing impairments have limited, if any, exposure to verbal language. Thus, because verbal linguistic skills are such a large part of intelligence tests, these children may be improperly diagnosed as mentally retarded, unless special care is taken when they are tested. Lowenbraun and Thompson (1982) discuss the issues involved in testing hearing impaired children. They suggest that the *Bayley Scales of Infant Development*, the *Uzgiris-Hunt Ordinal Scales of Psychological Development*, and the *Smith-Johnson Nonverbal Performance Scale* can be used with preschool hearing impaired children. The *WISC-R*, in conjunction with the *Hiskey-Nebraska Test of Learning Aptitude* can be used with school-age children. Other tests discussed by the authors are *Ravens Progressive Matrices*, the *Leiter International Performance Scale*, and the *Nonverbal Test of Cognitive Skills*.

Zieziula (1982) provides a comprehensive summary of commonly used tests, with information about their appropriateness for use with hearing impaired people. His summaries include information on reliability, validity, and norms. He also provides sources for obtaining further information about the tests. In Appendix A, Garwood (1983), provides a brief description of tests that can be used with preschool hearing impaired children.

### Visual Impairment

DeMott (1982) discusses assessment of visually impaired children. Two considerations in testing these children are (1) the materials must be presented in a form the child can use (large print, braille, or orally) and (2) items that require visual knowledge (such as "describe the evening sky") must be eliminated or modified. Modifications are sometimes made to tests such as the *WISC-R*. In addition, tests specifically developed for visually impaired children are available. One such test is the *Perkins-Binet Tests of Intelligence for Blind Children*. Tests for use with preschool visually impaired children are briefly described in Garwood's (1983) Appendix A.

### Severe Handicaps, Multiple Handicaps, and Deaf-Blindness

Severely handicapped, multiply handicapped, and deaf-blind children present special testing problems. Few tests have been developed to meet their special needs. Standardized tests can be adapted for use with these children but then comparisons with the norm group cannot be made. Mulliken and Buckley (1983) discuss a procedure called "testing the limits" where the child is first tested using standard procedures and then retested this time with adaptations being made to help a particular child respond to the best of his or her abilities.

One caution provided by a number of authors writing on the topic of testing severely handicapped children is that they must not be given tests designed for nonhandicapped infants.

Mulliken and Buckley (1983) include a chapter on assessing multiply handicapped and developmentally disabled children in each of the following areas: cognitive skills, psychomotor skills, social development, emotional disorders, communication, and educational achievement. At the end of each chapter is a list of assessment measures with a brief description of each. Sternberg and Adams (1982) include a chapter on assessment of severely and profoundly handicapped children including a comprehensive summary of 14 adaptive behavior instruments (see the section on mentally retarded students for a brief description of adaptive behavior measures). Bennett, Hughes, and Hughes (1979) discuss the use of three tests with deaf-blind children: the *Deaf-Blind Program and Ability Screening Test*, the *Peabody Intellectual Performance Scale*, and the *Callier-Azusa Scale*.

Further information about assessment techniques is provided in an article by Hupp and Donofrio (1983). They provide a model of assessment which is tailored to the student's instructional programming needs and emphasizes the importance of carefully planning the assessment based on prior observations of the child and discussions with the parents and teachers. The problem of adequate training for school psychologists is discussed in an article by Irons, Irons, and Maddux (1984). They suggest that instructional personnel should be more directly involved in the assessment process of severely handicapped children.

### Communication Disorders

Russell (1984) discusses problems of assessing children with communication disorders. These vary depending upon the cause and the severity of the disorder. However, tests may need to be selected that require only a yes-no response, which can be signaled by the child in a variety of ways. As mentioned previously, standardized tests can be adapted to the needs of a particular child but such adaptations make comparisons with the norm group impossible. Mulliken and Buckley (1983) provide a chapter on communication disorders, including a brief discussion of assessment. Langdon (1983) discusses assessment of bilingual language disordered students.

## Interpreting Test Results

Psychological testing can add to the information obtained about a child's ability to function in a variety of situations. Such information is valuable only if it is used as a basis for helping the child function better in those areas where problems are found. Wodrich (1984) provides the following advice for evaluating the usefulness of test results. The test findings should address the referral question. For example, if the referral question concerned the child's readiness for kindergarten, the report describing the findings should answer the question directly, discussing the child's abilities to function in kindergarten based on the findings. The findings should be interpreted into a meaningful statement about the child rather than simply describe the child's test scores. They should be written clearly so that people not familiar with the jargon of psychological testing can understand them. The report should make suggestions about what actions should be taken to help the child make any needed changes. For example, if a child is found to have a short attention span, the report might suggest particular games or exercises for increasing concentration. Finally, Wodrich reminds the reader that standard acceptable procedures must be used in administering psychological tests and that the limitations of such testing must be acknowledged. Such tests can be a useful tool if used as a part of a total, comprehensive assessment process.

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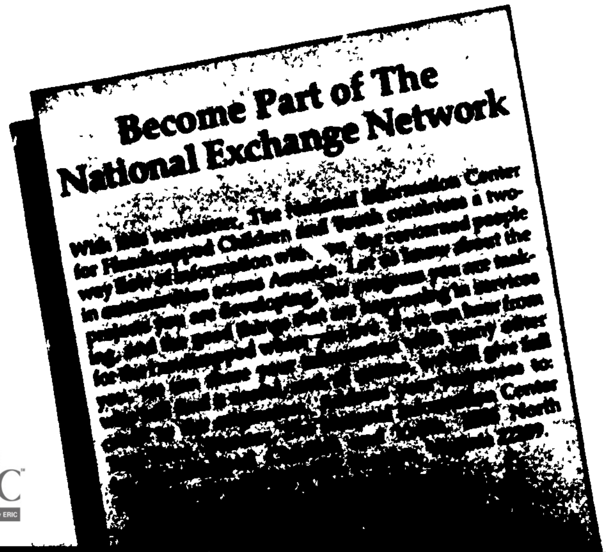

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News Digest

Information from the
National Information Center for
Handicapped Children and Youth

NOVEMBER 1985

# Children with Handicaps, Parent and Family Issues: A Guide to Readings

The birth of a child with a handicap or the discovery that a child has a disability can have profound effects on a family. On a regular basis, the National Information Center for Handicapped Children and Youth responds to letters from parents asking for advice on dealing with the pressures involved in raising a child with a handicap. The purpose of this issue of the *News Digest* is to give parents and the professionals who work with them a guide to literature that will be helpful in understanding the problems and developing solutions.

When parents find out that their child is handicapped, they begin a process of adjustment. For each family the experience is both unique and shared. How they react depends upon their own unique makeup; the attitudes and behaviors of family members, friends, and the larger society; and the child himself. However, certain feelings and reactions have been found to be shared by most parents as they learn to accept their handicapped child. These have been written about by both parents themselves and by researchers.

Initial reactions are similar to the reactions a person has with other traumatic events. The parents' reaction to having a child with a handicap is in part the product of earlier experiences. Several articles state that during pregnancy parents imagine their ideal child and when they learn that their child is handicapped, they must grieve over the loss of the imagined child before they can become attached to the real child. Bristor (1984) is one source of information about this idea.

Many authors have described the progression of feelings experienced by parents upon learning that their child is handicapped. Parents' initial reactions are often shock, disbelief, disorganization, and confusion, which may be accompanied by physical symptoms such as numbness, nausea, headaches, and fainting. This acute state of anxiety and stress is usually brief and is followed by a period of denial, where parents may not hear what is being said to them or may distort what they hear. During this period they may alternate between hope and despair or may avoid feelings altogether. A common reaction is to believe that the problem will simply disappear or that a magical cure will take place.

As parents begin to accept the reality of the situation, they often feel intense anger which may be directed toward self, spouse, medical personnel, God, and others; a need to find someone to blame; guilt about having such angry feelings and guilt about past actions that may have harmed the child. Other feelings include a sense of helplessness, self-pity, self-doubt, sadness, loneliness, a loss of interpersonal warmth, and fatigue.

These feelings were written about by Smith (1984) from the perspective of a parent who has experienced them herself and who has talked with many other parents who have described their own feelings. Dougan, Isbell, and Vyas (1979) also write as parents about their own experiences and feelings. They write short vignettes about a variety of topics, including the shock and grief they felt when they first found out that their child was handicapped.

Articles for family therapists describing from a research point of view many of the same feelings described in the articles by parents were covered by Fortier and Wanlass (1984) and Bristor (1984). They discuss the stages that families go through in adjusting to having a handicapped child. Fortier and Wanlass describe five stages from impact to closure; Bristor describes six stages from initial awareness to transcending the loss.

Several articles discuss chronic sorrow and periodic reoccurrences of intense feelings of loss. Shafer (1983) describes initial feelings of grief and says that these feelings tend to reoccur when the child reaches developmental milestones, such as the time for walking, entry into a special school, and the 21st birthday. This view also is expressed by Hamilton (1977), the mother of a retarded child who writes about feelings of anger, guilt, and shame.

These feelings can be intense and overwhelming and it is important for parents to know that they are normal and acceptable. They need to be able to express their feelings to someone who understands what they are going through. This can be accomplished by talking to another parent of a handicapped child, by joining a group of parents who have had similar experiences or by talking with a

> Parents of handicapped children not only need emotional support but they also need information. They need to know about their child's handicapping condition, about what services are available, and about what they can do to help their child develop to the fullest extent of his or her capabilities.

professional counselor who understands the nature of the loss the parents are experiencing. For information about parent groups in local areas, write the National Information Center for Handicapped Children and Youth (NICHCY), PO Box 1492, Washington, DC 20013.

Some guidelines for therapists working to help parents during the grieving process are provided by Fortier and Wanlass (1984) and Bristol (1984). Smith describes 20 constructive actions parents can take to help themselves during the adjustment process. In addition to joining a parent group, these include talking with mates and other significant persons, taking one day at a time, seeking information, keeping daily routines as normal as possible, and loving and enjoying their child.

## Finding Information and Services

Parents of handicapped children not only need emotional support but they also need information. They need to know about their child's handicapping condition, about what services are available, and about what they can do to help their child develop to the fullest extent of his or her capabilities. This information is sometimes difficult to obtain.

Some parents have difficulty in obtaining a diagnosis. McGlynn (n.d.) describes her six-year struggle to find an accurate diagnosis of her son's rare condition, which caused him to scream in terror every night. Based on her experiences, she makes suggestions to help other parents faced with similar problems. She suggests that parents keep accurate records that may provide a clue to the problem, use the library to research the problem, and find a specialist who takes them seriously and will work with them until a solution is found. She also suggests that the parents talk to everybody— not only to doctors, nurses, pharmacists, and teachers, but also to other parents, friends, neighbors, and people at work. Somebody may know somebody who can help. Parents should also evaluate information based on their own knowledge of the child. And finally, they should not give up until they have the information they need.

Additional information about the difficulties parents may encounter in their interactions with medical professionals is provided by Duffy, McGlynn, Mariska, and Murphy (n.d.). These authors, who are themselves parents of handicapped children, write about their good experiences as well as their bad ones.

Information on parents' legal rights and on some steps they can take to ensure that their children receive appropriate educational services are found in Dougan et al. (1979). Duffy et al. (n.d.) also discuss steps parents can take to obtain new services or to improve existing services. These include getting to know those in power and understanding their point of view, finding out what has been done in the past, obtaining the support of other community organizations, consolidating positive support, using a reasoned approach, undertaking a public information campaign with the help of local media, and continuing efforts even after success has been achieved.

## Stress and Family Adjustment

Adjusting to the birth of a handicapped child can create stress within the family. As previously discussed, the parents must deal with the grief they feel over the loss of the imagined child. Parents' individual feelings of loss can interfere with their ability to provide support to each other, creating stress within the marriage. Coping with uncertainty about the child's development is another source of stress. Even when the diagnosis is clear, there are still many unknowns such as how the child will respond to treatment, how friends and relatives will react, and what types of programs will be available immediately and in the future. Financial worries, the reality of caring for the child, and difficulties in finding appropriate services can also create stress.

The research literature on stress reactions in families with handicapped children has been reviewed by Crnic, Friedrich, and Greenberg (1983) and Sherman and Cocozza (1984), who find contradictory results. For example, some studies have found that family relationships deteriorate and others have found that they are strengthened by having a handicapped member. Both sets of authors conclude that the different findings are partly because of problems in research methodology and partly because of differences in family situations. Both provide evidence that social and community supports can reduce the stress experienced by families. Such supports include family members and friends who like the child and assume some of the caretaking responsibilities; positive community attitudes about handicapped persons; the availability of services such as parent support groups, respite care, and appropriate educational programs; and referral services that help match parents with needed services immediately following the diagnosis.

Family coping resources also influence how families react to stress according to Crnic et al. Such resources include energy/health/morale, problem-solving skills, supportive relationships, financial resources, religious beliefs, and feelings of self-efficacy.

Personal examples of how the support of family, friends, service providers, and community can help families make a positive adjustment to living with their handicapped child and establish a normalized routine can be found in Dougan et al. (1979) and Duffy et al. (n.d.).

Examples of how a family therapist can provide support during times of stress are given in the Family Life section of *Exceptional Parent*. A therapy session is described in the February 1982 issue in which the parents and maternal grandparents of Jill, an infant with cerebral palsy, discuss the problems they have had in communicating with each other since Jill's birth. The grandparents want to help find a program for Jill but their efforts are seen as interference by the parents, who are feeling isolated from each other and overwhelmed by the responsibilities of caring for a handicapped child.

In another session described in the August 1982 issue, the parents of two boys—John, a 20-year-old who has cerebral palsy and Jerry, a tenth-grade student who is not handicapped, talk with a therapist about their problems in helping Jerry choose the right school program. In a separate session Jerry discusses his problems with his parents, with having a handicapped older brother, and with school.

In the April 1984 issue, a divorced mother talks about how difficult it is for her to raise Billy, her learning disabled son and how she would like more support from Billy's father. In a separate session, Billy's father discusses his own problems in being a part-time parent.

In all three of these cases, the family therapist was able to help the family members understand and accept their own confusing feelings, to communicate better with each other, and to take some concrete actions to reduce family stress.

> A growing awareness that the adjustment to the special needs of a handicapped child influences all family members has resulted in literature and programs being developed especially for fathers, siblings, and grandparents.

The impact of having a handicapped child on the family system is discussed by Perske (1981). He says that although some families grow closer as a result of their handicapped child, others do not. Some families blame their handicapped member for all the problems they have and play games such as "he-broke-us-up," "he's-our-master," and "it's-all-his-fault." The author also discusses some of the good and bad aspects of being the sibling of a handicapped child.

A growing awareness that the adjustment to the special needs of a handicapped child influences all family members has resulted in literature and programs being developed especially for fathers, siblings, and grandparents. In a study of fathers' involvement in early childhood education programs, Markowitz (1984) conducted telephone interviews with the directors of 15 early education programs. She found that fathers participate in program activities when special efforts are made to include them. These include scheduling meetings to accommodate their work schedules, contacting them personally, including topics of particular interest to them, and having male staff members. She also found that the fathers' involvement in program activities resulted in positive changes within the family.

One program for fathers described by Markowitz is also described in greater detail by Vadasy (1982). This program consists of two-hour Saturday sessions for fathers and their young handicapped children. The fathers have an opportunity to discuss common parenting issues, to hear guest speakers, and to learn games and activities that they can carry out with their children. The curriculum was developed by the University of Washington's Supporting Extended Family Members (SEFAM) program and is available to other groups that are starting a program for fathers. SEFAM is also developing programs for siblings and grandparents.

Extensive information about how parents and professionals can help the siblings of handicapped children is provided by Powell and Ogle (1985). They review the research literature on the sibling relationship; describe some of the special needs and concerns of siblings; describe strategies parents can use to provide information and emotional support to siblings; discuss the use of counseling; provide strategies for encouraging social interaction; and discuss siblings as teachers, at school, and as adults. They also include a list of books that can help children and young adults adjust to having a handicapped brother or sister. A second list gives the names, addresses, and telephone numbers of organizations that provide support to parents and siblings of handicapped children.

One such organization is the Sibling Information Network, which publishes a newsletter and serves as a "clearinghouse of information, ideas, projects, literature, and research regarding siblings and other issues related to the needs of families with handicapped members." In addition to disseminating information, the network provides a way for members with similar interests to contact each other. Another such organization is Siblings for Significant Change. It is a sibling membership organization that disseminates infor-

Part of the adjustment process in having a handicapped child is preparing for the future. Depending upon the nature of the child's handicap, special training may be needed so that he or she will be able to function as independently as possible as an adult.

mation, conducts conferences and workshops, and promotes greater public awareness of the needs of handicapped persons and their families.

Help for grandparents is available in the form of a newsletter published by the King County (Seattle, Washington) Association for Retarded Citizens. The newsletter, called *Especially Grandparents* contains articles on topics of concern to grandparents and is designed to help them cope with the special challenges they face.

## Preparing for the Future

Part of the adjustment process in having a handicapped child is preparing for the future. Depending upon the nature of the child's handicap, special training may be needed so that he or she will be able to function as independently as possible as an adult. Moon and Beale (1984) outline some steps parents can take at the elementary, middle, and high school levels to ensure that their children learn the skills they will need to obtain employment after they have completed school. These include teaching the child to meet his or her own personal care needs and to perform household chores; providing him or her the opportunity to interact with a wide range of people in all kinds of settings to encourage the development of appropriate social skills; creating opportunities for the young child to learn about workers and what they do; and helping the older child find work after school, on weekends, and in the summer. In addition, Moon and Beale discuss the parents' role in working with the schools and the local rehabilitation agency to ensure that their child's educational program includes appropriate job training and to plan for his or her future employment.

Several publications discuss future employment opportunities for handicapped children. Smith-Davis (1983) provides an overview of the employment situation for handicapped youth. She discusses employment trends, the need for interagency collaboration, the role of business and industry in expanding opportunities for handicapped workers, the implications of the Job Partnership Training Act passed by Congress in 1982, adaptations colleges are making to accommodate handicapped students, and career paths in the arts.

Some approaches that have been developed to provide employment opportunities for severely handicapped persons are reviewed in the National Information Center for Handicapped Children and Youth's (NICHCY) January 1984 newsletter and in HEATH Resource Center's March 1985 fact sheet.

NICHCY's newsletter describes suitable methods for training severely handicapped persons to function successfully at work and reproduces a checklist of work skills developed by Egan, Fredericks, Hendrickson, Peterson, and Moore (1983). The list can be used to help determine the skills a handicapped person already has and those he or she still must develop in order to enter and remain in the competitive work force. The newsletter also describes several programs across the country designed to train and provide support to severely handicapped workers and to encourage businesses to hire such workers.

Other models of supported employment programs are described in the HEATH Resources Center's fact sheet. The fact sheet also provides information about postsecondary education, recreational, and residential programs for severely handicapped persons over the age of 21. The names and addresses of organizations that either provide programs themselves or disseminate information about available opportunities are included.

Although employment opportunities are increasing for handicapped persons, many will need some type of continued support throughout their lives. They may need both financial support and a legal guardian to protect their interests. Parents need to plan how this support will be provided after they die. Two sources of information on such planning are Hermanson (1984) and Appolloni and Cooke (1984). Hermanson provides a brief review of the steps parents should take in planning their estate. These include finding a lawyer who is experienced and knowledgeable in planning for the future needs of handicapped children, evaluating the child's needs and deciding what kind of care should be provided, determining what funds will be needed, and planning how the funds will be transferred to the child. Appolloni and Cooke provide a comprehensive discussion of guardianship and estate planning. Among the topics discussed in their book are:

- A trend for the government to cut back on human services programs, resulting in the need for improved strategies on the part of parents and advocates to provide for the future needs of handicapped persons.
- Legal considerations in appointing a guardian.
- Options for living arrangements such as shared living arrangements or institutional placement, group homes, foster families, and options for persons to serve as guardians such as siblings, friends, legal ad-

visors, bankers, and public or private agencies.

- Methods for writing wills that will provide for the care of the handicapped person and safeguard his or her entitlement to government benefits.
- Considerations in determining whether or not a particular handicapped person needs a guardian and, if so, whether a full or limited guardian is needed. This discussion includes a list of the types of decisions a person needs to be able to make in daily life and methods for determining whether or not help is needed in each of the areas.
- Recent developments in guardianship models, including an explanation of public and corporate guardianship and a description of several existing programs. The programs described include public programs developed in California and in Alberta, Canada, and several private programs--The Foundation for the Handicapped in the state of Washington; the Guardianship, Advocacy, and Protective Services program in Oregon; the Oakdale Guardianship Program in Michigan; and Crossroad Services Program in Iowa. Each program is different but each helps parents plan for the future care of their handicapped child and acts as a replacement parent after they have died. Some services include assisting the handicapped person in such areas as obtaining government benefits, maintaining suitable living arrangements, making purchases, entering into contracts, and obtaining appropriate educational services; managing trusts; monitoring programs; and advocating for the rights of the handicapped person.

> As parents plan for the practical aspects of caring for their handicapped child in the future, they should also consider the emotional aspects.

As parents plan for the practical aspects of caring for their handicapped child in the future, they should also consider the emotional aspects. Dougan et al. describe their feelings as they watch their handicapped children become adults, obtain jobs, and move away from home. Konanc and Warren (1984) discuss the problems families may have at the time their handicapped child graduates from high school. They describe therapy sessions for three families and provide guidelines for family therapists working with families during this transitional period.

In this issue of the *News Digest*, we have reviewed recent literature to present current thinking in three problem areas for parents of children with handicaps. We have cited tips for parents as they seek information and services, have explored patterns of stress families often face, and have looked at options for parents as they plan for their child's future. While we realize that each family's situation is different, we hope both parents and professionals will use this issue as a data source from which they can draw current information which can be applied to a family's own special needs in caring for their child with a handicap.

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