

DOCUMENT RESUME

ED 285 316

EC 200 253

AUTHOR Shaw, Stan F.; And Others  
 TITLE Preparing Learning Disabled High School Students for Postsecondary Education.  
 PUB DATE Apr 87  
 NOTE 29p.; Based on a paper presented at the Annual Convention of the Council for Exceptional Children (65th, Chicago, IL, April 20-24, 1987).  
 PUB TYPE Reports - Descriptive (141) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.  
 DESCRIPTORS \*College Preparation; Decision Making; Education Work Relationship; High Schools; \*High School Students; Interpersonal Competence; \*Learning Disabilities; Postsecondary Education; Relevance (Education); Student Placement; \*Transitional Programs

ABSTRACT

Increasing numbers of capable learning disabled students are attempting to make the difficult transition from high school to postsecondary programming. A comprehensive approach to better serve the college-bound learning disabled high school student includes early transition planning, instructional programming, social skills intervention, and selection of appropriate postsecondary settings. The early transition plan should identify the student during the freshman year, collect and review data about the student's school performance, facilitate initial joint decision making by school personnel, parents, and the student, and develop a comprehensive high school program. Instructional programming must focus on the development of generalization strategies for independent learning. Learning disabled high school students must be taught the social skills necessary for a successful college experience. The search for an appropriate postsecondary placement should begin early in the high school experience and involve the help of parents and high school personnel. It is essential to find a program that meets the individual needs of each student. A five-page reference list concludes the document. (CB)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

ED285316

PREPARING LEARNING DISABLED HIGH SCHOOL STUDENTS  
FOR POSTSECONDARY EDUCATION

Stan F. Shaw, Ed.D.  
Professor  
The University of Connecticut  
Special Education Center  
U-64, 249 Glenbrook Road  
Storrs, CT 06268

Jane Byron, M.A.  
Learning Disability Counselor  
Medford, Massachusetts

Kay A. Norlander, Ph.D.  
Assistant Professor  
The University of Connecticut

Joan M. McGuire, Ph.D.  
Assistant Professor  
The University of Connecticut

Patricia Anderson, M.S.  
Learning Disability Specialist  
The University of Connecticut

"PERMISSION TO REPRODUCE THIS  
MATERIAL HAS BEEN GRANTED BY

*Stan Shaw*

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC) "

U S DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it
- Minor changes have been made to improve reproduction quality

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

Based on a paper presented at the International Convention of the Council for Exceptional Children, Chicago, April 21, 1987

C 200253

PREPARING LEARNING DISABLED HIGH SCHOOL STUDENTS  
FOR POSTSECONDARY EDUCATION

ABSTRACT

Increasing numbers of capable learning disabled students are attempting to make the difficult transition from high school to postsecondary programming. This article is aimed at enhancing the ability of secondary school personnel to develop and implement effective social and academic interventions to support this population in their efforts to succeed in postsecondary education. Modifications in the secondary school curriculum are proposed including the early development of postsecondary transition plans, the focus of resource rooms on learning strategies and social skills training instead of content tutoring, and effective counseling to develop a match between the unique needs of the student and an appropriate postsecondary training opportunity.

## PREPARING LEARNING DISABLED STUDENTS FOR COLLEGE

There are almost 1.9 million learning disabled students currently receiving services in the public schools (Eighth Annual Report, 1986). As we move into the second decade of implementation of P.L. 94-142, high schools face increasing pressure to meet the needs of students with specific learning disabilities. Having been supported in successfully completing elementary school, these students are not only expecting to survive high school but, in addition, be prepared for postsecondary opportunities. White, Alley, Deshler, Schumaker, Warner, & Clark (1982) note that more than half the secondary learning disabled population are expected to seek postsecondary training. It should, therefore, be no surprise that the incidence of learning disabled college freshmen has increased tenfold since 1978 (Learning Disability Update, 1986).

Learning disabilities do not disappear at the onset of adolescence as many parents and professionals had hoped. Typical learning deficits apparent in secondary schools include information processing difficulties, specific language disorders, poor handwriting, short attention span, and limited non-verbal skills. Academic problems are often found in reading, written and oral language, and arithmetic. These problems have contributed to the learning disabled adolescent's becoming a passive learner with poor study

habits and inconsistent organization of school assignments (Blalock, 1981; Johnston, 1984; Lerner, 1984). By high school, the frustration, anxiety and failure experienced by many learning disabled students throughout their education are likely to manifest themselves in low self-esteem and poor self-concept. Concomitant psychosocial problems affect the adolescent's ability to sustain interpersonal relationships and deal with new social experiences (Hartman & Krulwich, 1984). A learning disabled student with these social limitations will need many more and diverse interventions to prepare for a postsecondary experience and eventual occupational responsibilities.

Although many colleges are gearing up to identify, attract, admit and program for learning disabled students (Mangrum & Strichart, 1984), there is concern about the preparation these students are receiving in high school. Major federal and state initiatives in recent years have been aimed at the transition from high school to the world of work, yet little has been done in regard to transition to postsecondary education (Okolo & Sitlington, 1986). In fact, many have noted that secondary school efforts for the learning disabled have been poorly planned resulting in inappropriate programs (Johnston, 1984; U.S. Congress, 1983). Professionals, parents, and students often concentrate on graduation from high school as the end goal

without monitoring the quality and relevance of the student's high school education in relation to postsecondary opportunities. A national survey of secondary programs for learning disabled adolescents (Wells, Schmid, Algozzine, & Maher, 1983) showed that 47% of special educators at the senior high school level spent most of their time engaged in subject matter instruction. Special educators report that their emphasis is on content tutoring in an effort to help learning disabled students pass their mainstream courses and graduate with their non-learning disabled peers (Carlson, 1985). Content that is taught in special education settings apparently is not being generalized or practiced in the regular classroom. Unless learning disabled students receive comprehensive and coordinated instruction from both regular and special educators, the transition to college will continue to be impossible, or devastating, for most learning disabled students (Dexter, 1982). Mangrum and Strichart (1984) report that many learning disabled high school students are graduating with insufficient knowledge in reading, writing, spelling, and mathematics. One must wonder if the failure of learning disabled students to acquire the content knowledge they need for college results from not being taught the essential skills so critical for success in both postsecondary and employment settings.

As noted previously, learning disabled adolescents often manifest unique personal, social, and emotional difficulties which can interfere with college success. Dealing with social perceptions, peer relationships, and teacher interactions must also be addressed during the secondary school experience. This paper will present a comprehensive approach to better serve the college-bound high school student including early transition planning, instructional programming, social skills intervention, and selection of appropriate postsecondary settings.

#### Early Transition Planning

Madeline Will (1986), Assistant Secretary of the Office of Special Education and Rehabilitative Services, recently urged that regular and special educators work cooperatively in providing a "personalized education" for the learning disabled. The development of such a personalized program is critical during the transition into high school. Many students with learning disabilities are no longer identified as such upon high school entrance. This may reflect poor coordination between the sending elementary or junior high school and the high school, limited or inappropriate programming by the high school or a conscious decision by the student or parent to "go it alone."

The early transition plan, therefore, must:

1. identify the student during the freshman year;
2. collect and review data on the student's school progress, potential academic performance and type of support service required;
3. facilitate initial joint decision-making made by school personnel, parents, and student regarding post high school goals (training and employment); and
4. result in development of a comprehensive high school program involving counselors, and regular and special education teachers enabling the student to achieve those goals.

A critical element in this program is determination of the curriculum and courses which will be taken. Too often the learning disabled are counselled into a general studies curriculum which will disqualify them from admission to most four year colleges. Additionally, many learning disabled students receive course waivers, often for foreign language or math, which can significantly limit college options. Course waivers may be necessary and appropriate but should only be provided based on valid diagnostic data. Furthermore, all parties should be made aware of the implications of waivers regarding postsecondary education.

Although the college experience is often very difficult for the learning disabled student, pacing of a course of study has proven to be an effective programming variable



(Norlander et al., 1986). A learning disabled college student who might experience frustration and failure with a full course load may have great success when taking only two or three courses. Likewise, if high school personnel and parents and students would be open to planning a four and one-half or five year program, learning disabled students would more likely leave high school with the skills, content, and positive self-concept necessary for postsecondary success.

The Individual Education Program or Transition Plan should provide for an early determination of postsecondary goals agreeable to all concerned and specification of curriculum, courses, time sequence, and support program appropriate for realization of those long-term goals. These goals will require continual monitoring and adjustment throughout the high school program as the student's postsecondary and career choices become refined.

#### Instructional Programming

For many years now, the aim of special education in general, and learning disabilities intervention in particular, has been on preparing students for the least restrictive environment, mainstreaming, and normalization. For learning disabled students seeking postsecondary training, the high school experience must lend itself to the

development of independent learners. Carlson (1985) states:

An effective program is one in which instruction will serve to diminish the impact of the presenting handicap upon future learning or enable the individual to function more adequately. (p. 312)

The majority of learning disability programs have implemented the tutorial model (focusing primarily on instruction in specific content with which the student is having difficulty in regular classes) or the basic skills model (focus on remediation of fundamental skills such as reading and mathematics). Deshler, Lowrey, and Alley (1979) noted that 69% of secondary teachers they surveyed used one of these approaches. Unfortunately, current research indicates that learning disabled students tend to reach a plateau in basic skill development during the secondary grades. Furthermore data do not support the effectiveness of the tutorial approach in helping learning disabled students cope with the demands of secondary school curricula (Seidenberg, 1986). Schumaker et al. (1983) also note that the tutorial approach is not effective in improving short-term achievement or in aiding the students to attempt and complete tasks independently. It is, therefore, no wonder that Carlson (1985) questions the ethical appropriateness of the widely used tutorial approach.

In light of the importance of independence and personal responsibility for learning at the postsecondary level, an alternative instructional approach should be considered. The

learning strategies model is based on the premise that learning disabled students are strategy deficient not having acquired techniques or rules to complete tasks independently. With an emphasis on learning "how to learn" (Deshler et al., 1984), the goal of the learning strategies model is to increase performance by teaching learning disabled students how to acquire, organize, store and retrieve information. The intent of this approach includes instruction in generalizing strategies to other situations and settings over time. This is far more effective than just focusing on specific content (Deshler & Schumaker, 1986). By successfully applying these strategies, the learning disabled student experiences academic success and independence while developing a more positive self-image.

Because of the problems learning disabled students experience in acquiring these learning strategies which relate to success in both high school and college, there is a growing demand for innovative interventions at the secondary level which address both content acquisition and learning strategies. Deshler and Schumaker (1986) point out the importance of staff development in fostering student gains. Teachers should enter the classroom with two distinct sets of goals for students. The first set of goals should be concerned with imparted content: what students should know as a result of instruction and learning. A second set of

goals should be concerned with the process of how this content is learned. These goals should focus on teaching and monitoring the acquisition of techniques and strategies for use in learning. Given the nature of meaningful learning, both kinds of goals are essential.

Secondary schools can achieve a balance between teaching course content and learning strategies while, at the same time, developing the shared responsibility called for by Will (1986). Content-specific subjects that are taught in high school provide the foundation for further learning. Without learning strategies, learning disabled students will continue to experience difficulties in storing, retrieving, and organizing the information needed to build a strong foundation of knowledge. Many non-learning disabled students who plan to attend college already have a firm grip on the basic course content, study skills and learning strategies.

This is often not the case for most learning disabled students entering college. While in high school, these students clearly need help in developing the study skills and learning strategies which will give them an equal opportunity for success in college. Skilled teachers are required to instruct students with learning problems in content areas. In contrast, the resource room teacher is a learning disabilities specialist who should focus on helping students become independent by teaching them study skills and learning

strategies, and how to generalize these strategies to a variety of content areas. Resource room teachers should not be required to teach or reteach specific course content except as a vehicle for the introduction of, or practice in, the use of learning strategies (Carlson, 1985). Course content teachers should use situations in which students exhibit difficulty in learning to provide practice in the application of learning strategies introduced in the resource room. Cooperation between course content teachers and resource room teachers is essential if students are to generalize learning strategies and study skills in the regular classroom. In this way, content and resource room teachers are providing the most effective learning environment for learning disabled students, equipping them with the skills they will need for life long learning. Norman (1980) gives clear direction to secondary school personnel.

It is strange that we expect students to learn yet seldom teach them about learning. We expect students to solve problems yet seldom teach them about problem solving. And, similarly, we sometimes require students to remember a considerable body of material yet seldom teach them the art of memory. It is time we made up for this lack, time that we developed the applied disciplines of learning and problem solving and memory. We need to develop the general principles of how to learn, how to remember, how to solve problems, and then to develop applied courses, and to establish the place of these methods in an academic curriculum. (p. 97)

The postsecondary environment is much less structured

than most high school settings, requiring a great deal of responsibility on the part of the student to determine what to learn as well as how and when to learn. Students with specific learning disabilities are often left confused unless specifically instructed in learning strategies which include skills such as course evaluation, planning long range study time, and faculty interaction. The high school setting does not typically provide students with the opportunity to practice these types of skills. It is imperative that special educators, in collaboration with content teachers, provide learning disabled students with simulated college experiences which will incorporate these skills.

#### Social Skills Programming

School personnel need to recognize that learning disabled high school students may not have the social skills necessary for a successful college experience. Learning disabled students often have serious interpersonal problems in the dorms and negative interactions with professors as they seek help or ask for accommodations. In the college setting, where students are expected to be independent and function as self-advocates, these problems soon become apparent.

Part of many learning disabilities is the inability to intuitively perceive verbal and nonverbal cues which identify appropriate behavior in various social situations. Families

and teachers of learning disabled students often shelter them from potentially stressful or threatening social situations, and thereby prevent learning disabled students from developing the social skills they need to function successfully in the world. The frequent inability of learning disabled students to maintain healthy and cordial relations with their friends and with adults reflects their poor social skills development.

Donahue and Bryan (1984) point out the importance of communication skills as they relate to peer group membership in adolescence. Numerous studies (Blalock, 1982; Wiig & Semel, 1976) indicate the long-standing nature of language and learning problems among learning disabled persons. Furthermore, there is evidence that learning disabled adolescents have difficulty with interpreting the nonverbal social cues important in peer relationships (Axelrod, 1982; Pearl & Cosden, 1982; Wiig & Harris, 1974).

Whether the lack of social skills development is the direct manifestation of a learning disability, a specific lack of communication skills, or the result of a protected environment maintained for the learning disabled student by his or her family and school system, it is vital that high schools recognize the need for social skills training for learning disabled students. It is important that high schools include social skills programming in the education

plan for the learning disabled. Individual objectives can be determined based on an assessment of whether the student lacks the skill, does not use it appropriately, or whether the student has behaviors which interfere with the performance of appropriate social behaviors (Gresham, 1982).

A major responsibility for high school personnel is the direct instruction of critical social development skills. Learning disabled students must be taught how to set goals, make decisions, and manage time. Problem solving skills, cue sensitivity, predicting consequences and alternative thinking are also possible learning objectives. There are numerous interpersonal communication skills including listening, perceiving verbal and non-verbal cues, conflict resolution, accepting criticism, and empathy which would improve the self-concept and develop the self-advocacy skills of learning disabled adolescents. Social skills can be taught through coaching, modeling, cognitive behavior modification, managing behaviors by teaching self-monitoring techniques, behavior modification and cooperative projects (Madden & Slavin, 1983). A number of social skills curricula for mildly handicapped adolescents have been developed for use in secondary schools including one by the University of Kansas Institute for Learning Disabilities (Vaughn, 1985). This approach includes steps designed to:



1. encourage the student to learn effective interpersonal skills;
2. teach the student when a particular skill might be employed;
3. encourage the selection of appropriate skills for given situations;
4. assist the student in the performance of learned skills in simulated settings; and
5. finally, monitor the spontaneous performance of the skill in the natural environment (Okolo and Sitlington, 1986; Schumaker et al., 1983).

The teaching of specific skills and appropriate social behaviors, combined with the delivery of appropriate counseling services, forms an effective "combination approach" to the teaching of important social skills. The availability of a specific time and place for personal exploration, and the services of a skilled counselor are important parts of any effort to help learning disabled students identify their own academic and social/emotional strengths and weaknesses. The purpose of such self-exploration is to enable students to understand their learning disabilities so as to be better able to realistically evaluate their academic and career options and to identify the social skills areas in which they need further training.

The kind of information that students acquire in a counseling setting often allays fears (i.e., "Am I retarded?"), improves self-concept ("I do have areas of strength"), and encourages the student to be an active and informed participant in program, postsecondary, and career decision-making. Other important counseling issues include the development of independence from parents, coping with the learning disability or the "label" of being learning disabled, dealing with self-pity and loneliness, developing social relationships and improving self-concept. In addition to individual counseling sessions, peer support groups may be an excellent vehicle for encouraging positive problem solving.

Career counseling is an important component of an effective counseling strategy. The counseling process is most productive after the learning disabled student has developed an awareness of his or her strengths and weaknesses. With this self-knowledge, students are better able to make realistic assessments of their interests and capabilities. Career counseling for a learning disabled student should include self-exploration, evaluation of motivation, career exploration, decision-making, and the development of a plan of action.

A thorough career counseling process is time consuming, and should be initiated before high school and then formally

developed for postsecondary transition early in a student's high school career. The counseling process may identify a variety of postsecondary school options. Early and comprehensive career counseling allows a student sufficient time in his or her high school years to consider college, and postsecondary school options other than college, as well as employment alternatives.

#### Postsecondary Placement

High school personnel as well as students themselves and their parents are often frustrated in searching out a suitable postsecondary setting which will afford opportunity for success. While there are many directories of postsecondary college programs (Hartman & Krulwich, 1984), they often result in more confusion than clarity. Since there is no consistent pattern of learning disability programming at the college level, selecting an appropriate college is often an overwhelming but critical task.

As there are many more colleges seeking, or at least admitting, learning disabled students than actually have programs, it is imperative that professionals help learning disabled students act cautiously during the selection/application process. Simply finding the "best" program or the one with the most services is not the solution. A match must be made between the unique needs of

the learning disabled student and the characteristics of the college and the learning disability program (McGuire & Shaw, 1987).

#### Characteristics of the Learning Disabled Adolescent

There is no longer any question that the needs and problems of the learning disabled adolescent are highly individual. In fact, the only common characteristic may be the discrepancy between apparent ability to learn and actual academic achievement. Therefore, the process of determining postsecondary schooling must begin with a comprehensive psychoeducational evaluation of the student's academic and intellectual functioning. Many colleges are requesting evaluations which are less than three years old and which include instruments which are valid and reliable with this population (Norlander et al., 1986). High school personnel should consider working cooperatively with a local office of the Department of Vocational Rehabilitation/Division of Rehabilitation Services in collecting and analyzing this information. Some high school programs are reassessing students who were, at one time, receiving learning disability services. Such a diagnostic review may be valuable given the possible need for postsecondary support services or modified admissions procedures.

### Characteristics of the Postsecondary Institution

High school counselors are skilled at helping typical students select a college. The learning disabled student, however, needs more diverse and detailed information from high school personnel. Such a student will need to carefully investigate admissions procedures. How the learning disabled student compares to the typical entering student in terms of preparation and performance is critical in preventing a frustrating, and possibly short-lived, college experience.

A number of academic considerations are also critical for the learning disabled student. The availability of pre-college courses, developmental/remedial courses and course waiver provisions are essential information. The size of the institution itself, as well as the size of classes, particularly the number of required large lecture classes, may be particularly important to learning disabled students with any of the social or interpersonal problems noted earlier. Finally, it is necessary for these students to ascertain the institution's policies regarding reduced courseload. These questions and others cannot often be gleaned from a college directory or even an individual college catalog. A guidance counselor's personal contacts and knowledge of various postsecondary settings can be extremely helpful to learning disabled students and their parents. Calls or visits orchestrated by or involving the

counselor or special educator can be very informative.

### Characteristics of the Learning Disability Program

Once high school personnel, student, and parents have carefully evaluated his or her personal strengths and weaknesses and considered the elements of a postsecondary institution which would be appropriate, then it is time to consider support services. A student with specific disabilities in math might not require support services if the postsecondary institutions of choice do not require coursework in math. On the other hand, a student who achieved in "modified" high school classes without support services might require extensive assistance in a competitive academic university program. The same student might continue to manage independently in an open enrollment, two-year college with a vocational-technical focus. Secondary personnel must help the student analyze and match the availability and quality of support services to his or her specific need.

A critical aspect of any program is personnel who provide direct services. A problem is evident in the fact that fewer than 10% of college disabled student services personnel who generally have responsibility for these programs are trained in special education (Blosser, 1984). Numbers of professionals have noted that service providers often lack

relevant experience or training to fulfill the many responsibilities associated with these programs (Shaw & Norlander, 1986). A learning disability program which does not have staff who are trained, certified and experienced learning disability practitioners may be of questionable value.

McGuire and Shaw (1986) have developed a systematic guide to facilitate the process of matching the characteristics of the learning disabled student to the institution and support program. It is imperative, however, that the skill and expertise of high school special educators and counselors be part of this process. Many L.D. support programs encourage visits by classes of secondary learning disabled students. Such a visit might function as motivation to succeed for some students as well as providing postsecondary transition information for staff and student alike.

#### Summary

It is a time of change and challenge for high school learning disability programs. The redefinition in focus from high school graduation to planning for postsecondary education will require many modifications in programs and roles. The traditional academic support function of resource rooms will be further redefined to involve increased focus on learning skills training. Secondary curricula will need to

be infused with social skills units and other instructional elements needed for postsecondary success. Secondary special educators, counselors and regular classroom teachers must continue to improve collaborative efforts to unify school programs and provide effective transition throughout the high school years and into postsecondary settings. As these changes progress, teacher educators will be responsible for analyzing effectiveness and training personnel for these new roles.



## REFERENCES

- Axelrod, L. (1982). Social perception in learning disabled adolescents. Journal of Learning Disabilities, 15, 610-613.
- Blalock, J. (1982). Persistent auditory language deficits in adults with learning disabilities. Journal of Learning Disabilities, 15, 604-609.
- Blalock, J. (1981). Persistent problems and concerns of young adults with learning disabilities. In W. Cruickshank & A. Silver (Eds.), Bridges to tomorrow: Vol. 2. The best of ACLD. Syracuse, NY: Syracuse University Press.
- Blosser, R.E. (1984). The roles and functions and the preparation of disabled student service directors in higher education. Doctoral Dissertation, Southern Illinois University at Carbondale. (University Microfilms No. 8425117)
- Carlson, S. (1985). The ethical appropriateness of subject matter tutoring for learning disabled adolescents. Learning Disability Quarterly, 8, 310-314.
- Deshler, D.D., Lowrey, N., & Alley, G.R. (1979). Programming alternatives for learning disabled adolescents. Academic Therapy, 14, 54-63.
- Deshler, D., & Schumaker, J. (1986). Learning strategies: An instructional alternative for low-achieving adolescents. Exceptional Children, 52(6), 583-590.

- Deshler, D., Schumaker, J.B., Lenz, K.B., & Ellis, E.S. (1984). Academic and cognitive interventions for LD adolescents: Part 1. Journal of Learning Disabilities, 17(2), 108-117.
- Dexter, B.L. (1982). Helping learning disabled students prepare for college. Journal of Learning Disabilities, 15(6), 344-346.
- Eighth Annual Report to Congress on the Implementation of the Education of the Handicapped Act. (1986). Washington, DC: Office of Special Education and Rehabilitation Services.
- Gresham, F.M. (1982). Misguided mainstreaming: The case for social skill training with handicapped children. Exceptional Children, 48, 422-433.
- Hartman, R.C., & Krulwich, M.T. (1984). Learning disabled adults in postsecondary education. Washington, DC: Higher Education and the Handicapped Resource Center.
- Johnston, C.L. (1984). The learning disabled adolescent and young adult: An overview and critique of current practices. Journal of Learning Disabilities, 17(7), 386-391.
- Learning Disability Update. (1986, May). Information from HEATH, p. 3.
- Lerner, J. (1985). Learning disabilities: Theories, diagnosis and teaching strategies (4th ed.) Boston, MA: Houghton Mifflin Company.

- Madden, N.A., & Slavin, R.E. (1983). Mainstreaming students with mild handicaps: Academic and social outcomes. Review of Educational Research, 53, 519-569.
- Mangrum, C.T., & Strichart, S.S. (1984). College and the learning disabled student. Orlando, FL: Grune & Stratton.
- McGuire, J.M., & Shaw, S.F. (1986). McGuire-Shaw postsecondary selection guide and manual for learning disabled students. Storrs, CT: McGuire and Associates.
- McGuire, J.M., & Shaw, S.F. (1987). A decision-making process for the college-bound learning disabled student: Matching learner, institution, and support program. Learning Disability Quarterly, in press.
- Norlander, K.A., Shaw, S.F., McGuire, J.M., Bloomer, R.H., & Czajkowski, A. (1986, October). Diagnosis and program selection for learning disabled college students. Paper presented at the Eighth International Conference on Learning Disabilities, Kansas City, MO.
- Norman, D.A. (1980). Cognitive engineering and education. In D.J. Tuma & B. Reif (Eds.), Problem solving and education. Hillsdale, NJ: Erlbaum.
- Okolo, C.M., & Sitlington, P.L. (1986). The role of special education in LD adolescents' transition from school to work. Journal of Learning Disabilities, 9, 141-155.
- Pearl, R., & Cosden, M. (1982). Sizing up a situation: Learning disabled children's understanding of social

- interactions. Learning Disability Quarterly, 5, 371-373.
- Pearl, R., Donahue, M., & Bryan, T. (1981). Children's responses to nonexplicit requests for clarification. Perceptual and Motor Skills, 53, 919-925.
- Schumaker, J.B., Deshler, D.D., Alley, G.R., & Warner, M.M. (1983). Toward the development of an intervention model for learning disabled adolescents: The University of Kansas Institute. Exceptional Education Quarterly, 4, 45-74.
- Seidenberg, P.L. (1986). A framework for curriculum development for secondary learning disabled students (Position Paper 3). NY: Long Island University.
- Shaw, S.F., & Norlander, K.A. (1986). The special educator's role in teacher training for personnel working with learning disabled college students. Teacher Education and Special Education, 9(2), 77-81.
- U.S. Congress, Senate Committee on Labor and Human Resources. (1983). Education of the handicapped act amendments (Senate Report No. 97-191). Report to accompany S. 1341, 98th Congress, 1st session. Washington, DC: U.S. Government Printing Office.
- Vaughn, S.R. (1985). Why teach social skills to learning disabled students. Journal of Learning Disabilities, 18(10), 588-591.
- Wells, D., Schmid, R., Algozzine, B., & Maher, M. (1983).

- Teaching LD adolescents: A study of selected teacher and teaching characteristics. Teacher Education and Special Education, 6, 227-234.
- White, W.J., Alley, G.R., Deshler, D.D., Schumaker, J.B., Warner, M.M., & Clark, F.L. (1982). Are there learning disabilities after high school? Exceptional Children, 49, 273-274.
- Wiig, E., & Harris, S. (1974). Perception and interpretation of nonverbally expressed emotions by adolescents with learning disabilities. Perceptual and Motor Skills, 38, 239-245.
- Wiig, E., & Semel, E. (1976). Language disabilities in children and adolescents. Columbus, OH: Charles E. Merrill.
- Will, M. (1986, November). Educating students with learning problems - A shared responsibility. Washington, DC: Office of Special Education and Rehabilitation Services.