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AUTHOR O'Donnell, Donita G.  
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ABSTRACT

This book discusses the challenge for today's schools to find the ways in which students with learning disabilities (LD) learn best and to deliver those opportunities for learning. The chapters focus on: (1) the elements of effective learning that belong in every classroom and the characteristics of students with LD; (2) theories of teaching and learning, including developmental theory, behavioral theory, metacognitive theories, and psycholinguistic theory; (3) remediation of and skills in reading, spelling, written language, mathematics, affective skills, physical education, and learning strategies; (4) forms of learning compensation in language, mathematics, socioemotional and behavioral skills, and cognitive strategies; (5) enrichment and content in the areas of literature, writing, and communication, mathematics, science and computers, visual arts and performing arts; and social sciences, business, and economics; (6) the assessment process, including regulations, descriptions of types of assessment, and sample checklists and assessment forms; (7) establishing the quality of assessment in content areas, learning processes, and transition; (8) detailed descriptions of 15 Wisconsin programs and less detailed information about efforts in other states; and (9) recommendations for creating a collaborative school. Appendices discuss resources, Wisconsin LD eligibility criteria, the multidisciplinary team process, Individualized Education Programs, preventing inappropriate referrals of language minority students to special education, transition services, sample learning style and strategies questionnaire, and sharing resources. (Each chapter contains references.) (JDD)

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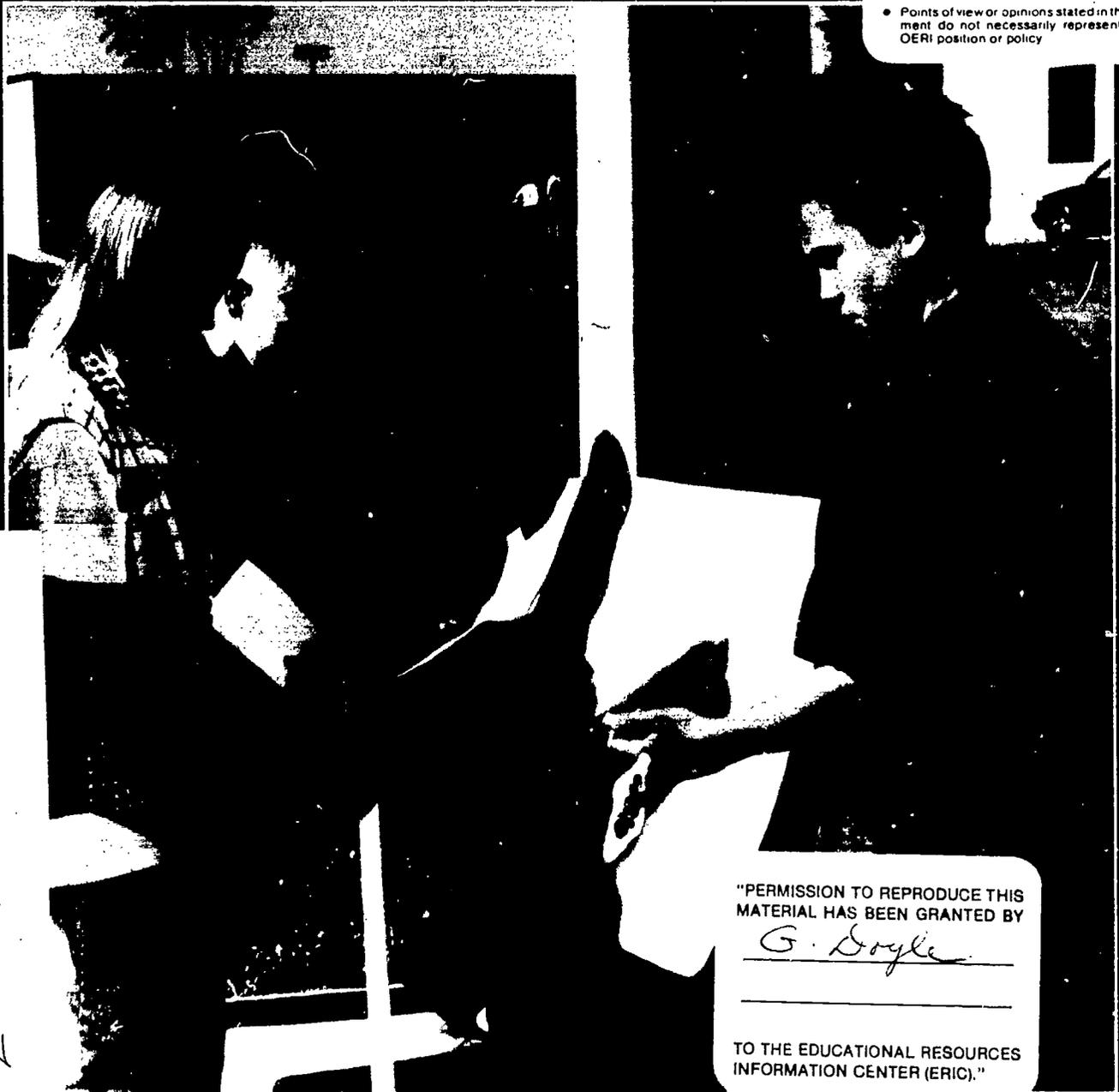
# CREATING AN ENVIRONMENT FOR LEARNING DISABILITIES

## A Resource and Planning Guide

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# **Creating an Environment for Learning Disabilities: A Resource and Planning Guide**

**Donita G. O'Donnell**  
Consultant  
Learning Disabilities



Wisconsin Department of Public Instruction  
Madison, Wisconsin

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# Foreword

Children with disabilities, whether the disabilities are academic, cognitive, behavioral, or physical, are members of every community in Wisconsin and across the nation. But communities exist where some members are excluded or devalued. Like all children, those with disabilities can become adults who participate in and contribute to their communities, or they can grow to be adults who exhaust the system's resources. The path each child follows is determined by the members of the community, by their acceptance or rejection of these children. Creating a learning environment for children with disabilities requires an understanding of individual needs and a commitment to creating an environment that welcomes and supports each individual during their moments of weakness as well as their moments of strength.

I am reminded of the story of the birth of a star somewhere in the Milky Way. Moments after its birth, the newborn star suddenly dimmed. It was a Flare Star, a star that was sometimes bright and sometimes dim. As the little star developed, its variations in brightness continued, but the galaxy, which is filled with stars of all types—dwarf stars, double stars, white stars, giant stars, and others—became a fascinating and glorious community, enhanced by diversity.

This book, *Creating an Environment for Learning Disabilities: A Resource and Planning Guide*, is about establishing communities of learning that encourage students with learning disabilities to participate as full members. These children, like children without disabilities, need to be participants in work and activities that will help them to become lifelong learners, to serve others, to take leadership responsibilities, to contribute to production, or to create and invent. The task of creating these learning environments belongs to each and every member of the community. Together, we will establish environments enhanced by diversity and enriched by communities that support each and every member.

John T. Benson  
State Superintendent of Public Instruction

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## *Publications Task Force*

**William Joy**  
Director of Student Services  
Appleton Area School District

**Lois Klein**  
LD Teacher  
D.C. Everest Junior High School

**Patricia Marjala**  
Parent and School Psychologist  
Eau Claire (CESA 10)

**Harold Schmidt**  
EEN Program Supervisor  
Milwaukee Public Schools

**Francine Thompkins**  
Department of Education  
University of Wisconsin-Green Bay

## *Contributors*

**Betsy Baumhardt**  
Milwaukee Public Schools

**Jessica Beine**  
Milwaukee Public Schools

**Fran Breest**  
Milwaukee Public Schools

**Bertram Chiang**  
University of Wisconsin-Oshkosh

**Sheilah Cradler**  
Green Bay Area School District

**Terry Dragotta**  
Milwaukee Public Schools

**Craig Feiler**  
CESA 10

**June Fisher**  
Milwaukee Public Schools

**Mary Ann Fitzgerald**  
Milwaukee Public Schools

**Chris Gliszczinski**  
Milwaukee Public Schools

**Maureen Griffin**  
University of Wisconsin-Whitewater

**Nancy Harder**  
Milwaukee Public Schools

**Chris Jacobi**  
Milwaukee Public Schools

**Dennis Jakubowski**  
Milwaukee Public Schools

**Jan Jorgenson**  
Milwaukee Public Schools

**Lois Klein**  
D.C. Everest Junior High School

**Cindy Kneuppel**  
Milwaukee Public Schools

**Patricia Marjala**  
CESA 10

**Yvonne McCaskill**  
Milwaukee Public Schools

**Adrienne Nerad**  
Milwaukee Public Schools

**Sue Owens**  
Milwaukee Public Schools

**Kay Pelzek**  
Milwaukee Public Schools

**Stewart Purkey**  
Lawrence University

**Bette Sass**  
Milwaukee Public Schools

**Harold Schmidt**  
Milwaukee Public Schools

### *Reviewers*

**Vicki Snyder**  
University of Wisconsin-Green Bay

**Lynn Malloy**  
West Allis School District

### *Readers*

**Steven Ashmore**  
Brodhead School District

**Cheryl Breitung**  
formerly Eau Claire Area School District

**John Eyerly**  
Ashland School District

**Marlyn Franzen**  
Madison Metropolitan School District

**Dave Funk**  
New Berlin School District

**Mike Jamison**  
Parkview School District

**Judy Kubiak**  
Rhineland School District

**Robert Sullivan**  
formerly Milwaukee Public Schools

**Francine Thompkins**  
University of Wisconsin-Green Bay

**Julie Toshner**  
Milwaukee Public Schools

**Mary Lou Wendzinski**  
Milwaukee Public Schools

**Caren Wesson**  
Milwaukee Public Schools

**Judy Winn**  
Milwaukee Public Schools

**Marcia Wittrock**  
CESA 8

**Lynnea Lake**  
Spooner School District

**Joni Martin**  
Dodgeville School District

**Terri McCall-Burkham**  
Appleton Area School District

**Terri McGraw**  
formerly CESA 3

**Polly Neess**  
LaCrosse School District

**Jan Voeks**  
formerly CESA 12

## *Staff Contributors*

### **Division for Learning Support: Equity and Advocacy**

**Juanita Pawlisch**  
Assistant Superintendent

**Paul Halverson**  
Director  
Divisionwide Budget and  
Data Management

**Thomas Stockton**  
Team Leader  
Exceptional Education Team

**Lynn Boreson**  
Consultant  
Programs for Emotional Disturbance

**Melissa Keyes**  
Consultant  
Sex Equity Programs

### **Division for Libraries and Community Learning**

#### *Publications Team*

Margaret Dwyer, Team Leader, Editorial Team  
Jill Bremigan, Graphic Artist  
Victoria Horn, Graphic Artist  
Brian Satrom, Proofreader  
Dianne Penman, Management Information Technician

# Introduction

The message of this book is very simple: every student can learn and it is a challenge for today's schools to find the ways in which students learn best and deliver those opportunities for learning. Yet the responsibility for students' learning does not fall totally on the school. Every person who influences a student's life—parents, teachers, administrators, coaches, childcare professionals, siblings, not to mention the individual student—plays a role in that student's learning.

Challenges in learning exist for everyone, but perhaps none are so frustrating as those in the lives of students with learning disabilities (LD). These are students with normal, sometimes gifted, intellectual abilities, whose learning is affected negatively by weaknesses or deficits in basic skills and learning strategies. These learning problems are not due to any physical or mental disability, but to difficulties in receiving, expressing, or storing information.

During the production of this book, different media and other groups focused attention on the overenrollment of children of color in special education. The DPI has coordinated several initiatives on an agency level to explore the reasons for, and the possible solutions to, the problem. This book approaches overrepresentation of race, ethnicity, and gender by helping educators distinguish between differences and disabilities. In encouraging teachers to consider race, socioeconomic status, or gender when assessing or teaching their students, this book makes a first step toward improving the problem of overrepresentation of certain groups of students. The author hopes this book can function as a springboard for the important discussions that this issue will require.

Chapter 1 reviews the elements of effective learning that belong in every classroom, whether a student with LD is present or not. Managing behavior, time, and resources while conducting solid instructional planning is a necessary component of every successful teacher's day. But if regular instruction does not meet the individual needs of a student, then supplemental instruction must occur. Supplemental instruction includes the integral components of remediation, compensation, and enrichment. When supplemental instruction does not provide the student with appropriate learning opportunities, teachers must shift to special, or exceptional instruction. In Wisconsin, students with a need for special education are known as Exceptional Educational Needs (EEN) students.

In chapter 2, readers will find a theoretical base on which to understand the various kinds of instructional methods discussed in the book. Developmental, behavioral, metacognitive, and psycholinguistic theories are all explored in chapter 2, with detailed information focusing on direct instruction, inquiry instruction, peer and cross-age tutors, written language strategies instruction, constructivist theory, cooperative learning, reciprocal teaching, emergent literacy, holistic instruction, and language experience approach. The theories discussed and the theorists cited should help educators develop, or build upon, their professional, academic foundation of knowledge about learning.

Chapter 3 focuses attention on remediation; that is, the *remedying* of gaps in learning that are generally linked to a lack of fundamental skills, and remediation is usually achieved by addressing problems in basic skills. This chapter offers readers, in the context of the basic subject areas, programs and techniques to determine the sort of learning disability a student may have (behavioral, developmental, or perceptual,

among others) which may help reduce the effects of the disability. Beyond the basic subject areas, this chapter also offers a section on learning strategies, mentioning two separate programs that teachers may find helpful.

Chapter 4 invites readers to explore the different forms of learning compensation that educators can offer to students with LD. Compensatory practices usually involve strategies that either circumvent a learning problem, if remediation has not been able to garner any success, or keep a student apace with peers while the disability is being remediated. An abundance of compensatory strategies, techniques, and equipment are offered, from the technological to the simply logical. As in chapter 3, approaches and practices are offered in the context of the basic subject areas. Sections on behavioral skills and learning techniques, respectively, are also part of this chapter.

Enrichment is the focus of chapter 5, which provides recommendations for educators who are looking to offer students diverse ways and reasons to learn. Enrichment is connected primarily to content and is a tool for teachers who wish to create in students the ability to study basic subject areas, larger concepts, and the interrelationships between them. There are fewer specific programs or tools for enrichment than for remediation and compensation, but this allows for greater creativity on the part of the teacher or any other adult to make any experience an opportunity for learning.

The element of assessment is divided into two chapters in order to discuss the *process*, as directed by federal and state regulations, and the *quality*, as professionals would like to see it delivered. Chapter 6 begins with a comparison of federal and Wisconsin definitions of learning disability and the basic regulations that accompany the assessment of LD. Wisconsin educators will note that this book offers information that is useful to educators everywhere, beyond the borders of the state. Specific information about Wisconsin, its laws and helpful interpretations of them, appear in the appendixes that follow the chapters of text.

Within chapter 6 is an alphabetical listing that includes both traditional kinds of assessment, like standardized or norm-referenced testing, and cutting edge approaches, like portfolio. The four elements of the assessment process, analysis of the status quo, collection of needed information, analysis and synthesis of information, and application of new information, are achieved through methods such as interviews, observations, and testing. Chapter 6 offers a wealth of helpful sample checklists, reports, and learning style inventories that can be used directly or adapted for the various individuals involved in assessment. It also offers specific information on writing individualized educational plans (IEPs).

In chapter 7, readers return to the basic subject areas to examine the quality of their assessment procedures. There is also important information on assessment in the learning process, with an emphasis on learning styles and strategies. Assessment for transition applies to moving in or out of a special education program, postsecondary technical or vocational training, and postsecondary academic preparation. This chapter contains material that should help every student with LD realize her or his dreams beyond the doors of the school.

Chapter 8 provides readers with a detailed description of 15 different programs in the state of Wisconsin and less detailed information about efforts in other states. The detailed program descriptions cover all age groups, geographical locations, and subject areas. The programs have been tested and found to be highly successful. Graphic examples and contact information are available for all 15 programs.

In its final chapter, this book offers readers rules and recommendations for building a collaborative school, the fundamental requirement for delivering services to students with LD. Without collaboration, all of the teachers, parents, coaches, and other important adults in the lives of children would find themselves functioning in isolation. Chapter 9 departs from the format of the rest of the guide, offering information in a question-and-answer style that should help readers with quick referencing.

# Effective Education and Learning



In many school districts in Wisconsin, students whom the district has identified as learning disabled (LD) may have learning problems or difficulties, but may not have an actual disability. The December 1, 1992 Federal Child Count indicated LD prevalence rates in Wisconsin school districts ranged from 1.54 percent to 12.73 percent. Thirty-two districts identified more than 7 percent of their population as learning disabled, and 71 percent of Wisconsin's 255 smaller districts had a higher LD prevalence rate than the state average of just over 4 percent. "Overenrollment of children in special education is both a state and national problem that should be of concern to parents, general education and special education staff, and policy makers. It has many causes and certainly cannot be called a special education problem that will respond to a special education solution," reports Wisconsin's Department of Public Instruction. (Benson, 1994)

Over the last several years, research in education has recognized the best formats and strategies for maximizing students' achievement. Educators know the components of effective teaching and the ways these practices improve learning in both exceptional and non-exceptional learners. Unfortunately, a major gap remains between what educators know and what they do: a bridge must be built between knowing effective practices and implementing them in Wisconsin's classrooms. For many students, the difference between "life with a label" and a normal life without that label depends on the

willpower of the teacher. Effective education is only as effective as each teacher makes it.

Special education programs were not initially created, and do not currently exist, to fill the gaps of ineffective instruction, or to meet the needs of culturally or environmentally different students. Their purpose is to supplement, when appropriate, and supplant, when necessary, general education services when those services, at their most effective, are still inadequate to meet the needs of students with disabilities. For students with learning disabilities, the line that separates disability from underachievement due to other reasons is difficult to define. Students with learning disabilities have normal intellectual abilities. They do not have learning problems because of a physical disability, such as hearing impairment or cerebral palsy. Neither mental inability nor psychological problems have created their learning problems. Physical or mental impairments may coexist with a learning disability but are not the primary cause of the student's learning problems.

The many and varied learning styles and needs of students in today's classrooms require teachers, if they are to be successful, to maintain a wide base of knowledge about learning, and a large supply of methods, techniques, and materials. Alone, no teacher will establish such a repertoire. Collaboration among teachers is necessary. Teachers need access to resources that will help them determine the way each student learns and the skills each requires to be a successful learner, whether the learning differences among them are based on culture, en-

vironment, or disability. These resources exist in every community in the traditional form of books and magazines. Teachers also have access to information through state-of-the-art technology, other teachers, community members, and, perhaps most importantly, parents. Educators must take care to identify each child's learning style and need rather than rely on such categorizations that, for example, assume all American Indians learn in one way, all children with learning disabilities have a particular learning style, or all environmentally disadvantaged students need a unique discipline style. These kinds of assumptions are in conflict with Wisconsin's laws that prohibit pupil discrimination "because of a person's sex, race, religion, national origin, ancestry, creed, pregnancy, marital or parental status, sexual orientation, or physical, mental, emotional or learning disability." (stat. 118.13) This first chapter defines some of these effective elements of teaching, while the whole guide explores instructional practices and learning strategies. The guide also provides specific information on identifying students with learning disabilities and offers recommendations on creating collaborative schools.

## *Elements of Effective Instruction*

Effective educators attend to the individual needs of students. They learn to recognize the right time to apply the appropriate practices and strategies, while making the distinction between students with learning differences and those with disabilities. To accomplish that difficult task, teachers should establish effective educational programs for every student. The elements of effective instruction include

- careful instructional planning,
- time and resource management,
- successful behavior management, and
- appropriate supplemental instruction.

## **Instructional Planning**

Instructional planning is the cornerstone of effective teaching. During instructional planning the teacher selects the educational objectives and the instructional strategies needed to meet them. Good planning allows the teacher to focus more on the student's actual learning, to seek and provide feedback, and to attend to

individual differences while keeping the whole class on task. Instructional planning is a cyclical process that requires teachers to do the following:

**Determine educational objectives.** Teachers must first decide what students will learn. This initial stage is the time to analyze the curriculum to determine the instructional design that best achieves the educational goals. It is also the time to analyze the tasks that best ingrain the sought-after skills in the students. Teachers must define their expectations as explicitly as possible at this point because expectations encompass more than objectives and skills: teachers' expectations also determine the kind of treatment they will offer their students. High, but realistic expectations increase student learning, and accurate and flexible expectations meet individual student needs.

**Prepare instructional strategies.** At this step, teachers decide how students will learn the skills and information identified in the educational objectives. In order to know what the roles of the teacher and student are during the learning process, teachers must determine the necessary specific learning activities, materials, methods, and any other possible modifications for individual learners.

**Evaluate and provide feedback.** Teachers must decide ways that they and their students can assess the students' achievement of any given educational objective. They must determine what specific methods of evaluation to use. This step shows that teachers who provide frequent feedback and benchmarks of learning to each of their students give them the ability to evaluate themselves.

**Attend to individual differences.** With educational objectives defined, instructional strategies prepared, and an evaluation system explained, students can take responsibility for their own learning. With the teacher's guidance, students will be able to decide what they need to know, how they will learn it, and what evidence will exist to show achievement of their goals. This fourth step completes the cycle. At this stage, teacher and student may re-assess the educational objectives, the instructional strategies, and the system of evaluation for re-learning, or they may assess these components for the purpose of learning new skills and information.

All students need what Caine and Caine (1991) describe as "relaxed alertness," a security in the learning environment combined with sufficient challenge to inspire learning. Researchers like Robert Marzano (1992, 1993) and Theodore Sizer (1984) have written about the content of effective lessons. The experts agree that effective lessons include several stages. The stages often overlap, are not always clearly delineated, and occasionally are repeated throughout the lesson. The stages are basic to good instructional presentations and generally include:

**Introduction.** The introduction gets the students' attention, specifies the lesson objectives, establishes the importance of the material, and relates the new material to material previously taught.

**Presentation.** The presentation must be clear, well organized, and appropriate to the students' needs. A positive effect and a brisk pace are important to good presentations.

**Demonstration.** Demonstrations through pictures, videotapes, and modeling help students visualize the expected outcomes.

**Guided Practice.** The initial practice of a new skill should be guided practice. The teacher closely monitors the practice and provides immediate feedback to reinforce accurate responses, correct errors, and encourage exploration and creativity.

**Independent Practice.** This is practice given to students who have demonstrated some command of a new skill. It provides for skill maintenance and development. Providing students with independent practice before they have acquired sufficient mastery reinforces *wrong learning*—that is, learning information or skills incorrectly.

**Monitoring and Feedback.** Monitoring allows the teacher to determine the effectiveness of the lesson, and feedback tells the students how they are doing.

**Systematic Evaluation.** Systematic evaluation involves the selection of key skills, selection of evaluation instruments, establishment of minimum criteria, and data recording.

**Periodic Review.** Review is used to maintain skills, ensure retention, and link new input to old.

## Time and Resource Management

The amount of time spent learning a subject is directly related to student achievement, yet school time always seems very limited. It is divided into academic learning time and nonacademic time. Nonacademic time includes making announcements, taking attendance, collecting milk money, conducting disciplinary action, and the like. Effective time management increases the amount of academic learning time by reducing nonacademic time. Academic learning time has many components, with varying levels of importance and purposes. The following descriptions cover both academic and nonacademic time.

*Allocated time* is generally synonymous with academic learning time because it is the time actually available for teaching and for learning activities. Teachers control the amount of allocated time for the different subjects. Effective teachers review the amount of time given for each subject, reallocate as necessary, specify allocated time in their schedules, and include transitional time between learning activities and other classroom presentations.

*Engaged time* is that portion of allocated time when the student is actively engaged in learning. The amount and intensity of the engagement relates directly to increased learning. The teacher's goal is to engage the students in learning for 80 to 85 percent of the allocated time.

*Success rate* is that part of engaged time when the students are successfully learning.

*Transitions*, movements from one activity to another, can absorb excessive time if not managed correctly. Posted schedules, accessible materials, and clear, step-by-step directions increase the likelihood of smooth transitions. Various incentives, in the form of games, can motivate students to complete transitions quickly.

*Sponges* are activities that use unexpected leftover time. The teacher should build some contingent sponge activities into every lesson plan so as not to lose this time. Sponges include work in independent learning centers, games or exercises to review rules or previously taught materials, and organization of materials (notebooks, desks, portfolios) for learning.

*Proper classroom organization* helps increase academic learning time by minimizing the opportunities for disruption. The arrange-

ment of desks should provide for teacher monitoring of all students and allow every student to see all presentations and visuals. The arrangement of the materials should provide every student easy access to them without disturbing the rest of the class. The classroom arrangement should reduce movement as much as possible.

Research has demonstrated that teachers with traditional seating arrangements pay more attention to students sitting in the first two rows and center of the room. This "T-zone" attracts the high achievers. Low achievers gravitate toward the back and the sides of the room. Seating arrangements that disperse the high and low achievers equally about the room help the teacher to attend better to the entire class.

## Behavior Management

Effective classroom management techniques help the teacher cope with factors that influence and provide an environment conducive to learning. Teachers can develop a proactive response in their students by being aware of the major factors that influence student behavior in the learning environment. In doing so, teachers create a safe climate for learning and provide continuous monitoring and appropriate responses to spontaneous behavior. These factors include

- self-concept,
- motivation,
- rules and routines,
- activities, and
- reinforcement methods.

### *Self-Concept*

Students with poor self-concepts tend to be less attentive, less successful, and more disruptive in school. While the school is not the only environment that affects self-awareness, it should be an environment that has a positive impact on a student's self-esteem. For many students it is the only environment that can provide an affirmative, safe climate that establishes higher expectations and improves a student's self-concept. The behaviors that should be modeled in the classroom are

- friendliness,
- enthusiasm,

- acceptance,
- compassion,
- persistence,
- sense of purpose,
- work ethic and value of effort,
- respect for problem solving and mental involvement, and
- fairness with individual support at its core.

### *Motivation*

Teachers raise motivation by assigning work that increases students' success rate and helps the students to recognize that they are making progress. Classroom problems decrease appreciably when students experience the security and challenge of meaningful learning opportunities that reinforce each student's internal locus of control, known as *effort*. Only effort is within the student's control. Learners who attribute success to effort will accept challenges and seek to meet them. Effective teachers recognize and reinforce the belief that academic success is related to personal effort.

When students fail, it is important to help them understand why they failed and how they can improve. Rather than allowing students to blame factors beyond their control, such as their innate abilities, luck, or the difficulty of the task, effective teachers recognize that several reasons may exist for failure. By identifying factors in the instructional design that definitely or possibly have contributed to the lesson failure, the teacher is able to correct the problem, reteach the student, and improve the instructional design for future lessons.

Because even well-motivated students with positive self-concepts will misbehave on occasion, teachers must also be adept at managing the external influences on behavior in the classroom.

### *Rules and Routines*

Classroom rules should be discussed with the students. When appropriate, students should be involved in developing the rules, as this increases ownership and compliance. The rules need to be taught, posted, and reviewed regularly. Four to six positively stated generic rules are usually enough to govern a classroom. To be effective when establishing rules, teachers should

- give clear directions,
- frequently state the desired behaviors and attitudes,
- present clear expectations, and
- respond consistently, equitably, and quickly to rule violations.

Routines for handling daily activities should be taught at the beginning of the school year. Routines increase the predictability of the environment, eliminate unnecessary questions, and reduce disruptions.

### *Activities*

Teachers need to roam the classroom during students' independent practice to assist students with problems and keep them on task. Assistance to individual students should be brief to allow for continued monitoring of the entire class. When the teacher concentrates too much attention on one student to the exclusion of others, problems will arise with other students. This is where alternative procedures, such as peer tutoring and cooperative learning, can assist the teacher in meeting the needs of all students in the classroom.

Monitoring requires the teacher to observe several activities going on in the classroom at one time. Good monitoring detects misbehaviors early and prevents them from evolving into major disturbances.

### *Reinforcement Methods*

Responding to misbehavior or perceived misbehavior can accelerate or decelerate the behavior depending on the quality of the response. Behavior has to be viewed in the context of the classroom activity. For example, talking may be appropriate in small group activities, but not during a quiz. Teachers must respond to misbehaviors that interfere with the lesson, are public, and are capable of spreading. Failure to respond will undermine the management plan. Misbehavior during transitions or gaps in instructions, however, may be ignored if it is likely to cease once instruction commences.

Interventions for misbehaviors should be as short as possible, be made quickly, and disrupt the classroom as little as possible. Low profile interventions are effective when they are timely, consistent, and accurate. Teachers should

use the least obtrusive intervention first: signaling with the eye or hand, moving to a closer proximity to the student, making verbal comments, or perhaps name-dropping. If these fail, the teacher should use desists—specific, concrete, non-debatable directions—to bring the student back to task quickly. A desist requires that the teacher describe the misbehavior, state the appropriate behavior, and gently demand compliance. An example of a desist would be "Hal, you are talking. You are to be quiet and read your history book. Please start reading now." Teachers should never ask, "What are you doing?" because this kind of remark increases the risk of accelerating the misbehavior.

Incentive systems reward appropriate behavior by identifying the desired behavior, establishing the reward(s), and maintaining a system of accountability. To be effective, the rewards must have value to the students and can be given only in accordance with the established procedures.

Consistent use of the practices listed above will result in more effective classroom discipline and more learning. Some students will require more individualized behavior management plans. Teachers can use cognitive behavior modification techniques to change academic and social behaviors. These techniques change what the student thinks about immediately before and during the targeted behavior. Students will exhibit many different kinds of behaviors, and educators may find Randall Sprick's publication, *The Solution Book: A Guide to Classroom Discipline*, a useful resource because teachers can find the recommended technique and implement it. Information about many other programs that are available to help teachers manage classroom behaviors is available in appendix A. Whatever the management program, the keys to success are firmness, consistency, and fairness.

### **Supplemental Instruction**

The element that bridges the gap between effective classroom instruction and special education is supplemental instruction. It may include a variety of modifications of "traditional" instructional activities or effective practices that are often overlooked in the average class-

room. Working collaboratively, general and special educators can recognize mismatches in expectations and actual performance. A good first step is the use of a checklist, such as figure 1, "Match/Mismatch Checklist," that indicates possible discrepancies. Figure 2, "Match/Mismatch Worksheet for Summary and Plan," allows teachers to rank their concerns and plan for follow-up action.

Supplemental instruction can be defined in three categories: remediation, compensation, or enrichment activities. The three categories are integral and usually function simultaneously. Remediation activities focus on skills, compensatory activities focus on strategies, and enrichment activities focus on actual content. Remediation—that is, finding a remedy for a problem—is the primary goal, and so remediation is usually the initial approach. But whenever remediation is unsuccessful, or successful only to a certain point, compensation is necessary. Enrichment activities, because they create meaningful use of knowledge, add a level of interest that will heighten any student's awareness of the content of the lesson. Individual students in both special and regular education react to the same lesson differently and require their teachers to offer information in various ways. For teachers of students with LD, the willingness to create and adapt to different forms of supplemental instruction is crucial to their students' success.

**Remedial** practices are activities designed to increase specific skills in the learner that are deficient or underdeveloped. For a student having difficulty learning multiplication facts, direct instruction in multiplication facts would be an example of remedial instruction. A more in-depth look at direct instruction theory appears in chapter 2.

The following assumptions underlie the remediation approach:

- Prerequisite skills can be identified and sequenced.
- Past skill instruction has been inappropriately delivered.
- Students will benefit from specific skill instruction, and such instruction will be more valuable than other curriculum options in relation to school and life success.
- Attainment of functional skills is vital for success.

**Compensatory** practices are activities designed to allow students to "get around" a deficit area—a reading disability, limited attending ability, weak auditory perception, or poor fine motor skills—by using their strengths. Use of a calculator to solve multiplication problems would be an example of a compensatory approach. Educators must always exercise great care when using compensatory practices. It is essential to have adequate documentation of their necessity and to discuss their use with the student and the student's parents.

**Enrichment** practices are designed to allow students to go beyond basic foundational skills. Games, problem-solving activities, research, on-the-job experiences, and application of multiplication facts would be examples of enrichment.

These three approaches to modifications can be interrelated. For example, a computer program in mathematics that has students design a business might encompass remedial, compensatory, and enrichment activities. Research activities may involve remediation of writing skills, compensatory activities with an electronic spell-checker, and enrichment learning of the content measured. It is important to note that these three types of modifications can and should be incorporated into the traditional instructional lesson design in all classrooms. In addition, teachers must be careful not to overuse compensatory modifications at the expense of remediation and enrichment.

With the ever-expanding curricula and increasing diversity among students, effective teachers need to share concerns with one another and to collaborate in search of more resources, practices, techniques, and materials. Creating a collaborative school is an ongoing process that educators in a school building will continually develop. Chapter 9 of this book, "Creating a Collaborative School," guides readers through basic collaborative elements.

When remediation, compensation, and enrichment in the classroom are insufficient to address the needs of a student with LD, supplemental instruction becomes the core instruction for the student. This specially designed instruction is usually known as special education. Wisconsin educators often refer to special education as exceptional educational needs (EEN).

Figure 1

tch/Mismatch Checklist						
Student Name			Chronological Age		Date <i>Mo/D/Yr</i>	
School					Grade	
Person Completing Report			Position			
The student	Teacher Expectation		Student Performance		Match	
	Yes	No	Yes	No	Yes	No
attends school/class regularly						
attends school/class on time						
brings required materials						
works independently						
works within a group						
interacts appropriately with peers in classroom						
reacts appropriately to peer provocation						
participates appropriately in group discussion						
reads material in front of a group						
takes on fair share of group project						
enters room appropriately						
sits at own desk or stays at work station						
raises hand or gets attention appropriately						
uses free or unstructured time well						
conforms to most classroom rules						



## ***Characteristics of Students with LD***

Children with learning disabilities have as much individuality as other children. But they share some general characteristics with one another about which educators may want or need more information.

### **Normal Intelligence**

Students with learning disabilities have normal intellectual abilities, though their peers may view them as stupid, and adults often accuse them of being lazy or stubborn. Often a student with a learning disability has good spatial skills, thinks creatively, and is a natural artisan. A student with LD frequently has an outstanding ability to observe many events at once in his or her environment. These are all skills and abilities that traditional educational environments have not valued because the student with learning disabilities may be so preoccupied with observing many events within one space that he or she is unable to focus on the relevant one.

A student with LD might construct an object in an unconventional manner without the use of accurate measurements or written language. The student may listen to rather than read the information about the object. These modifications that relate to *how* a student completes a task may not affect the quality of the outcome, but the effort and the successful completion will have a significant impact on the student's motivation to attempt another task.

### **Academic Deficits**

The most significant evidence of a learning disability is poor basic skills, and this is apparent to students with the learning disability, their parents, and their teachers. The difficulty that most students with LD experience in recognizing sequence and visualizing relationships usually result in problems learning to read, spell, and write. These learning disabilities also interfere with success in mathematics.

### **Within-Child Deficit**

While academic deficits are the most noticeable aspect of learning disabilities, they are

only the result of within-child factors that cause the child to experience learning problems. Within-child deficit, which is often referred to as a psychological processing deficit, is what distinguishes the child with a learning disability from one who is simply an underachiever, a slow learner, or a student with different developmental experience. Early estimates of the prevalence rate of learning disabilities stood between 1 and 2 percent of the population. Today, more than 3 percent of the students in every state in the U.S. are identified as learning disabled. (*Report to Congress, 1993*) In some states, the number is as high as 8 percent. While all of these students have significant deficits in academic areas, not all of them have learning disabilities.

### **Conclusion**

Instructional planning, effective time and resource management, successful behavior management, and appropriate supplemental instruction are essential elements of effective instruction. Remediation, compensation, and enrichment are necessary supplemental instruction that teachers of all students will need to use on occasion. Without them, many students will not learn successfully. With them, all students' opportunities for successful learning are significantly improved, but students with learning disabilities will continue to need specially designed instruction. The learning problems that accompany learning disabilities often result in poor peer relations, poor self-concept, frustration, anger, and, for some, behavioral problems. When educators recognize a disability as early as possible, they can respond to it with the necessary modifications, accommodations, support, and appropriate expectations that will alleviate the frustration that so many students feel. Successful educators working collaboratively identify the individual student's needs and develop reasonable educational objectives, appropriate instructional strategies, and clearly defined evaluation systems with frequent feedback, the student can experience successful learning, with the guidance of good teachers, until he or she reaches a level requiring more specialized assistance. The rest of this guide offers specific information about, and programs and models designed for, students with learning disabilities.

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# Theories of Teaching and Learning

# 2

Education is fraught with theories and philosophies about ideas that work, ideas that do not work, and explanations for both. Too often, these theories are built upon other theories, rather than on real and practical classroom experience.

This chapter presents brief descriptions of some of the theories that have found their way into classrooms serving students with learning disabilities and identifies a major theorist for each theory. Educators have empirically tested some of the theories, such as direct instruction, over many years and with thousands of students. Other theories, such as whole language and inquiry learning, are built on ideas that experts believe reflect quality education, but lack enough hard data to verify their efficacy with various types of learners.

Educators should be regular and critical readers of professional journals and other literature regarding educational theories and practices. They should learn to carefully select from proposed theories those practices that will most likely benefit each student with whom they work.

## *Developmental Theory*

The developmental learning theory is based on the belief that children's maturational levels, or stages of development, are the major factors that influence a student's ability to learn a concept or skill. Jean Piaget, a leading developmental psychologist, defined four stages of normal child development: sensorimotor period, preoperational stage, concrete operations

stage, and formal operations stage. (Piaget, 1970) It is widely accepted by educators that mathematics is an area of learning that exists on a continuum of skills and knowledge. These gradually increase as new skills and knowledge build on previous learning.

Reading is also taught as a developmental skill. In most school districts, the assumption is made that all students are ready to learn reading when they enter kindergarten, but only if their birthdates occur before some arbitrary date. (August 1 is currently the most popular.) In truth, such faulty thinking has resulted in higher percentages of students from the late-born group (those born just before the cut-off date) being referred for suspected learning disabilities. (Diamond, 1983; DiPasquale, Moule, and Flewelling, 1980) Maturational level should be carefully considered in determining the skills to be taught and the approaches used. Chall's stages of reading development, found in chapter 3, provide more information.

An extension of the developmental learning theory is the constructivist theory. Constructivist instruction emphasizes the student's use of new learning to construct or reconstruct her or his knowledge, skills, and beliefs. Teachers who apply this theory involve their students in using new learning in creative ways.

## *Behavioral Theory*

The behavioral theory is based on the belief that learning develops as the result of stimulus and response. Parents encourage their children to make sounds, to speak words, to write

letters, and to read books. When children make an attempt at each desired behavior, parents reinforce the children's behavior. Teachers and students continue this pattern of creating the environment that encourages learning and rewarding efforts and successful accomplishments. B.F. Skinner, the leader of behavioral psychology, significantly influenced the development of instructional models such as direct instruction. (Skinner, 1957)

## Direct Instruction

Direct instruction is a behavioral theory that ensures high teacher expectations. Skills are task-analyzed and sequenced so that students are never expected to perform a task without demonstrating mastery of all the prerequisite skills. Working in groups of no more than six students per teacher, educators design strategies and choose examples that will eliminate confusion in the learner. To do this, educators incorporate the nine components described in figure 3, "Variable Components of Direct Instruction Method," to provide constant, direct teaching. Cumulative review of skills is necessary. Once taught, a skill is never abandoned, but is used as a building block for higher level skills. Students receive continuous feedback and teachers provide immediate correction when errors occur. Reteaching and retesting also ensure student mastery. The program's built-in management systems promote improved behavior and academic performance. Direct instruction not only teaches basic skills but also learning strategies and higher order thinking skills.

Like any good technique or curriculum component, direct instruction is a tool of the teacher. It may be adapted to suit both the teacher's needs and those of the student. Teachers nationwide can adapt it to other curricular elements in schools.

## Written Language Strategies Instruction

Writing strategies instruction, like learning strategies instruction, is a teaching methodology that helps students acquire, manipulate, integrate, store, and retrieve knowledge and skills needed for success with written language. Teachers explain the strategies, model the process, and guide the student's practice of those

strategies. This instructional model generally uses direct instruction teaching techniques.

## Metacognitive Theories

Metacognition refers to the normal thinking process that most learners use naturally; that is, they learn by answering questions about *what* they know, *how* they think, and *when* and *why* they should apply knowledge or strategies. (Paris and Winograd, 1990) Mastropieri and Scruggs (1987) defined this learning theory as one involving three stages: conditional knowledge, knowing that a particular strategy is needed; declarative knowledge, recalling the steps of the strategy; and procedural knowledge, implementing the strategy. A characteristic of successful metacognitive instruction is that students gradually learn to monitor and appraise their own learning. People use metacognitive behaviors when they make reminder lists, outline difficult reading materials, or otherwise analyze their ability to recall or use their knowledge. (Flavell, 1987) Lev Vygotski, a Russian psychologist who believed that learning involved social interaction and analysis of the cognitive aspects of learning, was a major theorist influencing metacognitive models.

## Cooperative Learning

Cooperative learning is an instructional technique for all students. Instead of applying a competitive or individualistic structure to students, cooperative learning allows students to work together in a group, learning new information, discussing or reviewing material, or completing a project. It provides a successful alternative for exceptional education students who are integrated in general education classrooms.

The following elements distinguish cooperative learning from distinct small group work:

- **Face-to-Face Interaction.** Students are positioned "eye-to-eye" and "knee-to-knee" so that the physical proximity encourages group efforts.
- **Positive Interdependence.** Students depend on each other in order to accomplish the group's task. This feeling that they "sink or swim" together and the positive interdependence, which the instructor promotes, results in common goals and rewards with shared resources, roles, or tasks.

## Variable Components of Direct Instruction Method

**A focus on the academic task at hand.** Direct instruction lessons are carefully designed to focus on the academic task by specifying the objectives, devising problem-solving strategies, developing teaching procedures, providing practice, and sequencing skills and examples.

**Sufficient engaged time.** Research has found a high correlation between engaged time—the time students actually spend on the academic task at hand—and academic achievement. Direct instruction achieves a high level of on-task behavior through group unison oral responses by students. This ensures that all students must participate all the time. When students know that they must respond all of the time, it greatly reduces off-task behavior. The teacher must maintain a brisk pace and change tasks quickly to maintain student attention. The use of both visual and auditory cues provides a multimodality approach.

**Highly structured lessons.** Direct instruction technique allows teachers to carefully isolate the skills to be learned or place them in sequence and gather them for presentation. Teachers explain the objective, provide models, present non-examples, give opportunities for practice, and provide corrective feedback as necessary.

**Teacher-directed activities.** Direct instruction assigns to the teacher the responsibility of providing the instruction necessary for the student to learn. Many students are able to extract information from activities that are less teacher-directed, but students with learning disabilities rely on the teacher to show them the way. The teacher is ultimately responsible for providing the modeling, examples, practices, reviews, and mastery opportunities for the students.

**Specified objectives.** Teachers must clearly show that the objectives of the instruction are specific observable behaviors. They should choose objectives for their usefulness and essentiality. Direct instruction incorporates the careful identification, selection, and presentation of essential skills in a meaningful sequence.

**Presentation and explanation of examples.** Selection of appropriate examples is crucial in the learning process. Examples must incorporate the skills the students already have, and must relate to the task at hand. Kameenui (1990) stated that a concept cannot be taught with one example. Educators must give the learner the opportunity to extract the essential features of the concept. The teacher's job is to provide sufficient examples for the students to learn the skill. Direct instruction makes meticulous use of appropriate examples.

**Sufficient practice.** Learning requires much practice. In some instructional programs, students are required to move on to new material before having mastered the old. Direct instruction ensures that the learner gets the practice that is needed for mastery. Review, or practice across many lessons, makes sure that the student has retained what has been taught.

**Corrective feedback.** Both teacher and student must recognize errors as they occur. Correction should take place immediately so that the learner does not continue in error. The saying "practice makes perfect" does not hold true when students merely practice making mistakes. The unison response format provides the teacher with the means to monitor all students' progress continuously. Teachers must remember, however, that the direct instruction method allows for a maximum of six students. When errors occur, the teacher can stop and adjust instruction. This is a critical component of direct instruction. The teacher must decide if the error is due to a lack of knowledge or a lapse in attention. Using that knowledge, the teacher determines how to adjust the instruction to correct the error. Direct instruction encompasses the use of many correction procedures to promote student success.

**Use of reinforcement.** So often the process of homework and classroom assignments requires students to wait a day or more to receive feedback on their work. Direct instruction responds to students with immediate and continuous feedback and reinforcement. Direct instruction efficacy gives students the best reinforcement of all—success.

- **Individual Accountability.** Students know that they are each responsible for learning the material that the group is assigned and helping others in the group learn it as well.

- **Social Skills Development.** Built into every cooperative learning lesson are specific social skills or group behaviors that students need in order to work effectively within the group. When students engage in appropriate behaviors, they usually complete the task in a successful manner and, as a group, jointly celebrate their effectiveness.

- **Monitoring and Group Processing.** Following the group activity, students receive an opportunity to reflect on how well they functioned as a group, and to set goals for the future that will improve their performance. The teacher provides feedback to the groups after observing the groups at work and collecting necessary data.

Cooperative learning is an effective instructional strategy that helps teachers work with a diverse gathering of students in heterogeneous groups. When a teacher uses cooperative learning effectively, students gain in achievement, pro-social behavioral skills, a sense of belonging, and more on-task performance. Two similar approaches that educators have found effective are reciprocal teaching and peer tutoring.

## **Reciprocal Teaching**

In reciprocal teaching, the teacher begins the process by modeling metacognitive reading behaviors, such as anticipatory set (thinking in advance about the content of the reading and the purpose of the reading), summarization, and classification. Eventually, students are appointed to take responsibility for performing these procedures with a small group of peers. Through this process, students learn to read content using anticipation, prediction, summarization, and other thinking behaviors that reinforce comprehension of content. (Palinscar, 1986)

## **Peer and Cross-Age Tutors**

Historically, teachers have used students to help their peers who need additional assistance in the classroom. With growing class sizes and an explosion of diverse student needs, staffing and time are at a premium. Peer tutors help

teachers improve the quality of the instruction received by all students in the classroom. Promoting the use of peer tutors in the classroom also increases the acceptance of special education students, provides opportunities to develop social skills, and supports improved performance in academic skill areas.

The research supporting the use of peer tutors (Slavin, 1991) has shown that a positive relationship exists between the consistency with which specific feedback is provided and the rate at which someone learns. Tutor programs provide that feedback and increase learning. Student tutor programs have effectively benefited both the tutors and tutees, academically and socially.

The establishment of a peer tutoring program requires time, planning, training, supervision, and development of materials. Educators should select tutors on the basis of their ability to model appropriate classroom behaviors, as well as the necessary academic skills. The tutors' interest in the job and level of responsibility is more important than specific skills in the academic areas. Tutors should be carefully matched with the tutees; age, behavior, academic skill levels should be considered carefully. Educators must design the training program to meet the needs of individual tutorial programs. Teachers should provide a specific format and train tutors to follow it. Teachers provide specific lesson content in systematic steps and direct tutors as to when they may proceed to the next level. Tutors should know how to record errors and provide teachers with feedback.

Some important guidelines include the following:

- Tutors need training in interpersonal and communication skills so they can provide positive feedback to the tutees. While tutors should not act as disciplinarians, they should deal effectively with minor inappropriate behavioral situations.

- Tutors should have a specific schedule and space in which to work. Alone or with the tutee, these time and space considerations should be consistent.

- Teams of teachers should develop a schedule for supervising the performance of the tutors. Tutors should receive feedback on their performance, and correction of any errors they may commit in their tutoring sessions. Teachers

should conduct more intense supervision at the beginning of the program.

- Some research advocates that tutors collect data. This procedure would depend on the age and skill level of the tutors. Data collection should be as simple as possible, and the teacher must retain the bulk of the responsibility.

Although the tutor program may provide intrinsic rewards for those involved, it is always beneficial to acknowledge the efforts of students who go beyond the daily expectations in the school environment. Educators should consider reinforcements such as awards, letters of appreciation from the principal, and special outings. In high schools, credit may be given toward academic requirements.

## *Psycholinguistic Theory*

Unlike behavioral theory, psycholinguistic theory suggests that an innate knowledge exists within each child and develops according to the child's schedule. As learning opportunities present themselves to the child, her or his innate knowledge revises and develops itself. Therefore, all language learning becomes interrelated, where oral language, written language, and reading interweave with one another into a complex system not easily observed or diagnosed. This theory encourages the belief that a child's language will develop and flourish if the child enjoys a stimulating environment and receives encouragement to use language. Noam Chomsky, a professor at the Massachusetts Institute of Technology describes the psycholinguistic theory of language development as an innate process that occurs in all languages. Children bring to the world of language a predisposition for defining rules for language development. These rules grow and are modified through language experiences. (Chomsky, 1965)

## **Emergent Literacy**

The basis for the philosophy of emergent literacy is the interrelation of speaking, writing, and reading. While speaking generally occurs first, this philosophy proposes that writing naturally occurs second in the developmental process. The reason for this is that writing involves personal experience and knowledge, while reading requires the reader to experience language from another writer's perspective.

Very young children begin to practice writing in the forms of scribbling and drawing, which is their technique for communicating in written form. Eventually, through learning, children revise the individual symbols that they use to reproduce symbols that others may recognize. This is the writing process.

Reading also develops in many children when they pretend to read, or pretend to interpret what someone else has written. Eventually, through learning, children see the symbols of written language as consistent communicators of someone else's thoughts and ideas. This is the reading process.

According to this theory, children's literacy develops from simultaneous experiences in oral language, writing, and reading. Weakness in language skills will have an impact on each of these areas.

## **Language Experience Approach**

Language experience combines oral language, reading, and writing by involving the student in a dialogue about the subject. The student dictates his or her own oral language to the teacher who writes it as the student says it, then returns it to the student for use as reading material. Because the content of the reading is based on the student's own experiences, comprehension, and motivation to read are high. This approach is used with beginning readers and as a remedial technique for older students.

## **Holistic Instruction**

The underlying theory of the holistic perspective leads teachers away from teaching isolated skills in isolated settings and toward creating an environment in which learning occurs while students are engaged in purposeful activities, drawn from real life, that involve interaction and cooperation. The holistic perspective is gaining attention and acceptance in general education because it uses high quality literature and focuses on the integration of skills and curriculum. This perspective appears to be particularly meaningful for some students with learning disabilities because the interactive, cooperative component is ideal for students who are in the general education classroom.

The holistic perspective recognizes that:

- the focus of instruction must be on learning how to learn;

- information that students learn, use, and maintain must be meaningful and make sense to them;
- the teacher is a facilitator of students and must become actively involved in the process of learning information, rather than dispensing the curriculum; and
- the focus of the teacher's role is on facilitating students to become actively engaged in their own learning.

The holistic perspective recognizes the student as the center of learning. It starts with the student and builds on his or her strengths. It takes information or skills the student currently knows or has mastered and uses them to facilitate learning and success. Holistic instruction compensates for a student's deficits with an excitement about learning and an opportunity to engage in real, purposeful activities. From a holistic perspective, all children simply engage in a process of learning as much as they can about a particular subject area. The amount and the nature of their learning will depend largely upon their backgrounds, interests, and abilities. This perspective allows all students to gain from learning opportunities rather than using the curriculum to define some students as successes and others as failures. When implementing holistic instruction, one route educators can choose is the process of whole language.

Whole language expresses an holistic theory that extends to all areas of learning and the curriculum. It is not an approach, technique, or method, but a process. Whole language emphasizes content, using frequent or daily writing activities, promoting contextual learning, and placing no limitations on writing.

Whole language is neither driven by, nor dependent upon, materials. It is a set of beliefs and perspectives that expects teachers to use the materials at their disposal to interact with learners, and to promote their literacy. Whole language is completely learner-centered. It is based on respect for, and trust in teachers and learners as active, problem-formulating, problem-solving, social individuals who interact. Thus, learning in the whole language process has practical links to real problems and issues. Learning becomes the primary responsibility of the learner, coached by the teacher. Whole language is a developmentally appropriate pro-

cess based on the strengths, interests, and needs of the individual.

Learners make connections between various events, between yesterday's and today's news, between their own experiences and those of someone else. Holistic learning capitalizes on a learner's natural ability to comprehend such connections by using an integrated curriculum or theme. The strength of thematic units lies in reinforcing and expanding the known while introducing the unknown. Language is the focal point that integrates all aspects of the learning experience while it correlates authentic expository and narrative forms of reading and writing.

Within a holistic environment, teachers themselves are learners, learning with and from their students. At the same time, teachers are students of learning, regularly observing their students as they respond to instruction. As a result, holistic teachers learn about literacy development and modify their instruction according to their student's needs. Teachers also reflect on their own teaching and on themselves as readers and writers, so they can share their own literacy experiences with their students.

For example, teachers help students guide their own learning by modeling questions such as "What do I already know about this topic?" "What might I learn by reading this (or doing this)?" "How does this relate to other knowledge or skills I have or need to have?"

Whole language has to do with real students using real language. Whole language recognizes that strategies and skills are necessary components of learning. A transfer of listening skills and speaking vocabulary to the silent language of reading depends upon the connection of the sound system to the writing system. The issue is not whether or not to teach strategies and skills, but rather the appropriate time to do so.

## **Inquiry Instruction**

Some content areas are best taught through inquiry instruction. Inquiry instruction is not merely the posing of a set of questions to students, because that action reflects testing procedures rather than teaching strategies. Rather, the use of inquiry teaches certain information or skills. Teachers find inquiry instruction useful as they plan lessons that

involve teaching concepts, patterns, or abstractions.

The structure of the inquiry is the unique feature of this type of instruction and teachers may do it in a number of ways. A teacher could structure the inquiry by giving the students a set of facts that they must construct into a graphic. A teacher could give students the topic of "food chains," and include the following information:

Examples of ecological areas are

- forests,
- jungles,
- deserts, and
- polar regions.

Examples of categories of animals are

- small,
- medium, and
- large.

From this information, the students must inquire about, and find patterns related to, predators and consumers. Students would follow their inquiry by constructing a graphic representation of the relationships.

Another example would be the use of a scientific process that involves students in developing a hypothesis that they systematically test and eventually either reject or confirm. Some examples of topics that use inquiry instruction effectively are the following:

- understanding causes of the Civil War,
- understanding symbiotic relationships,
- recognizing personal feelings regarding an issue such as capital punishment, and
- looking for patterns of conflict in countries that are developing industrially.

Also, when the main point of the lesson is to teach an affective response, which occurs often with students with LD, inquiry is often very helpful.

Teaching decisions when planning an inquiry lesson include

- determining the objective for the lesson,
- deciding on an opening for the lesson,
- choosing a procedure for structuring the inquiry,
- selecting a student evaluation procedure,
- planning for follow-through procedures on the topic.

To use an inquiry approach with students with LD, teachers may find it necessary to make

some individual accommodations. It is important to note that most inquiry occurs in cooperative groups, and so each student should be able to use whatever strengths he or she has in order to participate. This participation should help the student with LD benefit from the support of peers. During an evaluation the teacher may need to accommodate a student's strengths and weaknesses. The student with LD may need to describe the process orally rather than on paper. She or he may also need to review prior knowledge in a systematic way in order to make the clear and meaningful connections between topics. Special educators typically know little about inquiry instruction, yet it may be a viable alternative for students with LD and will be a necessary mode of learning for success in many general education placements.

Although teachers may know of many other theories of teaching and learning that are extremely helpful, the theories provided in this section are used frequently or have proved to work well in classrooms that include students with LD. As always, educators need to maintain their knowledge of current research, adapt theories to practice when appropriate, and view their work as practice that should drive theory.

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Students with learning disabilities are significantly deficient in the basic skill areas of reading; written language, including spelling; and mathematics. In addition, they often have difficulties with learning strategies and affective skills. Affective skills are a focus of the DPI's *A Programming Guide for Emotional Disturbance*, which offers excellent resources and strategies for dealing with students' affective development. The learning methods and techniques for academic instruction described in *Creating an Environment for Learning Disabilities* are necessary if the learner is deficient or disabled and requires remediation for success. Teachers must prepare themselves to integrate remediation with compensation and enrichment, the other two elements of successful supplemental instruction, in order to produce progress in the students' three goals of learning skills, developing strategies, and understanding content.

Remediation focuses on the first area, learning skills, providing a *remedy* to various learning disabilities. The following information describes some of the instructional techniques and programs that educators have found to be successful for remediating deficits in the basic skill areas of reading, spelling, written language, mathematics, physical education, and learning strategies.

## Reading

Debate over how to teach reading to students who have been identified as LD continues. The field is divided between those who teach read-

ing as a sequence of isolated, component skills and those whose teaching is based on a holistic theory. Regardless of the philosophy of teaching reading, educators cannot overlook the normal developmental sequence that all students must experience to be successful life-long readers. Jeanne S. Chall, Director of the Reading Lab and Professor of Education at Harvard University, describes five stages of development in her book, *Stages of Reading Development*. (1983) Figure 4, "Chall's Stages of Development," presents that material.

Reading is a complex process both to teach and to learn. Although many students are able to learn to read with little difficulty, some students will not become successful readers unless they receive careful teaching that is appropriate to their learning style and needs. Careful teaching means effective teaching. Effective teaching means teaching that results in reading success for each student. The following methods reflect various ways to approach readers with learning problems.

## Direct Instruction Programs

Direct instruction is a teaching method based on nine components which make up effective teaching. More information about this theory appears in chapter 2 of this guide. There are also formal programs that carry the title of Direct Instruction (DI). The design of these DI materials always involves an integrated curricula that includes four components: explicit academic strategies to facilitate generalization, well-sequenced skills including attention to

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## Chall's Stages of Development

### **Stage One: Initial Reading or Decoding Stage**

At this stage, students are beginning to learn the letters and to associate them with parts of words. In general, students who are about ages six and seven and in grades 1 and 2 are functioning in stage one. Most students at this stage of reading require careful and direct instruction in phonics and the sound-symbol relationship.

### **Stage Two: Confirmation, Fluency, Ungluing from Print**

This stage begins to consolidate the learning of stage one. The purpose of stage two is to confirm the knowledge the reader has, to attend to the skills of applying stage one to words in print, and to become a fluent reader. During this stage, most students should move from the bottom-up orientation of phonics instruction to the top-down orientation of a holistic philosophy.

### **Stage Three: Reading for Learning the New—First Step**

This stage begins the reading level described as "reading to learn." The learning at this initial information-gathering stage should be simple rather than complex and should be related to the reader's experience base. The readers at this stage, generally in fourth to eighth grade, learn little new information from print because print continues to be less efficient than other methods of learning, such as listening.

### **Stage Four: Multiple Viewpoints**

By the time students reach high school age, their purpose for reading should be learning new information, and their reading skills should be commensurate with that need. Reading to learn means being able to read and relate multiple viewpoints relevant to a specific topic.

### **Stage Five: Construction and Reconstruction—A World View**

In the final and most mature stage of reading, the reader has learned to construct new information based on qualitative assessment of information gained through reading of print, observation, and analysis and synthesis of relationships. This stage involves reading and selectively using printed material for specific purposes.

preskills, carefully selected examples to avoid confusion, and systematic review. Use of the specific DI materials, however, does not preclude the use of trade books or other reading and writing activities in conjunction with DI.

In successful holistic learning environments, teachers do not ignore diverse strategies and skills, but rather introduce, teach, practice, and apply them in the context of studying literature or a specific content-based reading or writing activity. Direct instruction programs exist *within* the holistic philosophy during the stages of reading instruction that require teaching of isolated skills. Programs such as *DISTAR I, II, and III* (Engelmann and Brunner, 1973; 1975), *Mastery Reading* (Engelmann and Brunner, 1988), and *Corrective Reading* (Engelmann et al., 1978) are the typical Direct Instruction materials that teachers use when remediating reading problems.

## Reading Recovery

The Reading Recovery program is a one-to-one tutoring program for students at the first grade level. The tutors provide these students with 30 minutes a day of intensive reading and writing activities designed to increase fluency. The tutor individually designs the programs after an intensive diagnostic teaching experience in which the child rereads familiar books, selected to allow the child an accuracy rate in excess of 90 percent. While this activity increases the student's confidence, fluency, and comprehension skills, it permits the teacher to diagnose specific error patterns and strategies the student uses in reading.

Based on the diagnosis, the tutor establishes daily activities that involve writing and reconstructing written language, sound-symbol activities, and the reading of new books, all of which increase in difficulty. Each program is unique and highly dependent upon the teacher's diagnosis of the child's successes and needs. When students reach the performance level of their grade level peers in the middle reading group, they discontinue the program. Students who do not reach that level by the end of the sixtieth lesson are released from the program, but educators do not consider their needs discontinued. These students need additional, more intensive reading remediation, such as a special education program.

Reading Recovery is a popular program with evidence of residual success. Similar programs

have also demonstrated success rates, and teachers should recognize the components of these programs that may result in success: emphasis on fluency, assurance of sound-symbol knowledge and skills, skillful diagnosis on the part of the teacher or tutor, teaching of strategies, integration of reading in a full language program, early intervention, one-to-one and small group instruction, individualized and diagnostic instruction, and consistent follow through and reinforcement of the language activities. (Slavin, Karweit, and Wasik, 1992)

Similar programs that educators might consider are the *Success for All* model, *Prevention of Learning Disabilities*, and *Programmed Tutorial Reading*. (Slavin, Karweit, and Wasik, 1992) All of these programs involve one-to-one or small group tutorial programs for students in the primary grades where prevention of learning problems is a key to preventing the misidentification of learning disabilities.

## Content Reading Including Study Systems—CRISS

Content Reading Including Study Systems (CRISS) focuses on teaching students how to learn in the area of content reading. Five components of the CRISS program include:

- incorporation of writing in content areas,
- incorporation of practical ideas about text organization,
- active involvement of students in learning,
- teaching students learning strategies, and
- the use of direct instruction methods. (CRISS, 1988)

Skills presentation moves from teacher demonstration to guided practice to independent application. By teaching these skills directly in the content areas, teachers avoid the need of transferring the skills from a reading class to a class in the specific content area. Application of this system can be useful in integrated team-taught classes, where the regular education teacher is responsible for content and the LD teacher is responsible for teaching study skills.

## Orton Gillingham Reading Method

The Orton Gillingham (OG) reading program is a remedial, phonics-oriented reading program for students with a reading deficiency, whether or not it qualifies as a learning disability. The

systematic approaches to reading, spelling, and writing are adapted to all levels from age six through high school. This alphabetic system, based on sounds and symbols of the alphabet, is based on the premise that children who fail to read by group methods do so because group programs rely upon visual-receptive strength. The OG training system stresses auditory discrimination abilities with supplementary emphasis on kinesthetic and tactile modalities.

The entire program is built upon this association among auditory, visual, and kinesthetic stimuli. Once the child has mastered basic sound production, she or he is introduced to phonograms (one letter or a group of letters that represent a phonetic sound). Once the phonograms have been mastered, they are used in drill procedures.

The success of this system depends upon its use with children with unimpaired auditory discrimination. It is essential that teachers diagnose the child's strengths as well as weaknesses. The program attempts to combine the use of phonetic study and experiences and language skills. Gillingham's belief is that the kinesthetic and auditory stimuli provided in the program should prevent the difficulties that some children experience in mastery of spelling and reading when they rely only on their visual-perceptual channels. (Gillingham, 1965)

*Project Read* is a systematic, multisensory approach to teaching reading by emphasizing sound-symbol relationships, diagnostic teaching, comprehension and strategies for successful reading, spelling, and language acquisition. While this program started in the Bloomington, Minnesota school district, its high rate of success and popularity have spread across the country. Unlike tutorial programs, this remedial approach is appropriate for use with groups of students.

### **Initial Teaching Alphabet (ITA)**

A five-year epidemiological study conducted by Jane Flynn, Ph.D., a research scientist with Gunderson Medical Foundation of LaCrosse, Wisconsin, and a former LD teacher, found that readers with LD are of two types: dysphonetic and dyseidetic. Dysphonetic readers are "those who are unable to gain access to the auditory analytic function needed to decode words." While their reading is inaccurate, their comprehension may be better than expected. Dyseidetic readers are "those who accurately 'sound out'

unfamiliar words but are unable to perceive words as wholes, and continue to rely on letter-by-letter decoding even for words encountered many times in the same passage." As a result, their reading is slow and labored, and comprehension is low. (Flynn and Deering, 1993)

In the Flynn study, students were remediated using three different programs: Orton Gillingham, DISTAR, and Initial Teaching Alphabet (ITA). ITA uses 44 symbols for each of the 44 speech sounds in the English language. It places an emphasis on Chall's second stage of reading development by providing frequent oral reading opportunities to improve fluency. The Flynn study found that for both types of disabled readers, ITA improved decoding skills and significantly increased reading fluency. More than 5000 students in 26 school districts in Minnesota and Wisconsin participated in this study. Many teachers in those states continue to use an ITA program to improve the reading skills of disabled readers. (Flynn and Deering, 1993)

### **Irlen Method**

Another theory is the Scotopic Sensitivity Syndrome, which describes reading disabilities as a visual-perceptual dysfunction that affects reading and writing-based activities. This syndrome is related to difficulties with light source, luminance, wave length, and high contrast. Fluorescent light and black print on white paper intensifies the difficulties. Scotopic Sensitivity may reduce the readability of letters or numbers due to print distortions and background interference when reading words or numerals. Dr. Helen Irlen first reported her hypothesis on scotopic sensitivity in 1983. Many people also refer to this as the Irlen Method, Irlen lenses, or Reading by the Colors.

To use the Irlen method, teachers can experiment with color overlays, and simply place different colored filaments over students' printed material to determine if any particular color improves the student's reading ability. According to this method, improvements may be seen in

- increased reading rate,
- increased reading comprehension,
- greater accuracy in reading,
- increased sustained attention,
- reduction in strain or fatigue, and
- increased ability to track while reading.

Although teachers report moderate success when using cover overlays, at this time research cannot provide an empirical base for the Irlen method. Readers who are interested in further information may find the December 1990 issue of the *Journal of Learning Disabilities* helpful, because it is devoted to the topical issue of the Irlen Method. (Blaskey et al., 1990)

## Spelling

As with reading, students learn spelling by progressing through developmental stages. Spelling is not learned through inquiry or dis-

covery methods, but through methods consistent with the student's individual developmental level. The stages described in figure 5 were developed by Feroli and Shanahan (1987).

Two popular programs used with students with spelling disabilities are the Spelling Mastery series, which is a developmental spelling program that begins with a phonemic approach. High-frequency words are taught through a "whole word" approach. In the upper levels of the series, a morphemic approach is used. Another spelling program, Corrective Spelling, is a remedial spelling program that emphasizes spelling through morphographs.

Figure 5

### Spelling Stages

#### Stage One: Developing Prephonetic Writing

In this stage, children at the preschool and primary grades scribble, imitate writing, and begin to learn to form letters.

#### Stage Two: Using Letter Names and Beginning Phonetic Strategies

Children begin to apply phonemes that they know to letters that appear to represent those sounds. While some sight words may be known at this stage, most words consist of invented spellings that approximate the most noticeable sounds of the word.

#### Stage Three: Using Syllable Junctures and Multisyllabic Words

Students' errors are limited to multisyllabic words, and particularly to the nonaccented syllables or those spellings that deviate from the known rules. Most students reach this age by the time of high school graduation.

#### Stage Four: Developing a Mature Spelling Perspective

Some students as young as ten years of age reach this stage in which rules and patterns are known and a sufficient supply of sight words and phoneme skills permit the student to accurately spell words. Unknown words are consistently checked with reliable resources, such as dictionaries and spellcheckers.

## Written Language

Students who do not succeed in writing at the same rate as their peers always present a challenge to their teachers. The goal of any written language program for students with LD is to help students develop the ability to communicate effectively in the mainstream of the school or community.

Some students with LD have more difficulty with the mechanics of writing than with idea expression. Others struggle with the process of

forming and organizing their ideas. Just as in the reading content area, the field in written language is divided over whether to teach writing as a sequence of isolated, component skills or to teach it based on a holistic theory. Teachers must provide the level of direct instruction necessary for each student, regardless of the method they use. They must model writing skills, and provide students with sufficient opportunity to write for a specific audience.

Several models exist for teaching written language skills to students with learning dis-

abilities. Figure 6, "Written Language Strategies," lists four well-known methods and the individual techniques of each. One approach encourages frequent writing in a variety of contexts. Other approaches are based on a fast-paced sequential teaching of skills involved in

writing. Still other approaches teach writing by using rules and guidelines and a problem-solving format. Used individually or in combination, these techniques and their adaptations can improve the writing skills of a student with LD.

Figure 6

<b>Written Language Strategies</b>	
<b>Method</b>	<b>Techniques</b>
<b>Whole Language</b>	No limitations on writing Frequent, daily writing activities Contextual learning writing assignments Emphasis on content
<b>Direct Instruction</b>	Fast pace Sequential organization Positive reinforcement Emphasis on success Usage skills
<b>Language Based</b>	Pragmatic, semantic, and syntactic features of language Verbal interaction Positive reinforcement Peer instruction Dialogue and translation of discussion into written form
<b>Structured Strategies</b>	Problem-solving tasks Task-analysis approach Emphasis on pre-writing planning Evaluation of other writing Lists of steps Concrete reminders Cloze procedure (This technique for building comprehension and language skills is based on the Gestalt idea of closure, an impulse to complete a structure and make it whole by supplying the missing element. It consists of either a random or consistent fill-in-the-blank format.)

Written language is a developmental skill that depends on a variety of cognitive and language-related skills. It is also developmental in terms of productivity, mechanics, and ideation. Teachers do not expect their students to write a paragraph unless they have first learned to write a sentence. In the same way, teachers should not expect students to create a story about an entire topic if their students still lack the skills to describe a single picture.

Teaching writing should begin, therefore, with a single motivator, such as a picture. Oral language, a discussion of that picture, is the first step and should be limited in complexity and scope. The content should be familiar to the student rather than imaginative or abstract.

Some teachers of written language believe in teaching the mechanics of writing, such as capitalization and punctuation, sequentially. Others teach the skills simultaneously. As in

reading, it is important to remember that students at this initial level of writing need to have clear objectives in limited numbers. To assign a beginning writer the task of writing a paragraph, neatly, with proper capitalization, punctuation, syntax, and spelling is inviting confusion, frustration, failure, and lower self-esteem into that student's life. Instead, one assignment should focus on capitalization, another on syntax. As the writer's skills develop, the teacher can combine two elements, such as proper capitalization and punctuation, and assign the objectives together.

Whether using a whole language, direct instruction, structured strategies, or language-based approach, teachers should use the following questions as a sequential guide to carefully plan the elements of writing to match their students' developmental level from beginning skills to mature writing.

**Task behavior.** Is the activity

- a choosing activity,
- fill-in-the-blank,
- completion of an idea,
- about concrete creativity, or
- about abstract creativity?

**Structure.** Does the student need

- maximum teacher guidance,
- teacher interaction, or
- simple teacher feedback?

**Motivation.** What inspires the idea or content:

- a single picture,
- several pictures,
- a topic sentence,
- a theme, or
- student's creativity?

**Mechanical components.** How many of the following skills are developed and to what level:

- spelling,
- grammar, and
- punctuation skills? (Snider, 1993)

Finally, students with learning disabilities need to be taught editing skills. Like the other skills, this teaching should focus on one element of written language at a time, gradually increasing over time. A simple checklist of elements is helpful and figure 7, "Student Writing Checklist," provides such a list of the problem areas that students generally encounter.

Figure 7

### Student Writing Checklist\*

Student Name	Chronological Age	Date Mo/D/Yr
School	Grade	
Person Completing Report	Position	

- |   | Yes                      | I Need Practice          |
|---|--------------------------|--------------------------|
| 1. Do I use complete sentences?<br>with capital letters?<br>and punctuation?                                      | <input type="checkbox"/> | <input type="checkbox"/> |
| periods   | <input type="checkbox"/> | <input type="checkbox"/> |
| question marks  | <input type="checkbox"/> | <input type="checkbox"/> |
| exclamation marks   | <input type="checkbox"/> | <input type="checkbox"/> |
| quotation marks   | <input type="checkbox"/> | <input type="checkbox"/> |
| commas  | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Do I avoid "run-on" sentences?<br>Or do I use "and," "and then," "and so" a lot?                               | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Do I avoid sentence fragments?<br>Or do I sometimes forget to finish my sentences?                             | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Do I avoid using the same old words <i>over and over</i> ?<br>such as is, are, am, was, were, have, said, make | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Do I try to make my writing more interesting?<br>by using specific words?                                      | <input type="checkbox"/> | <input type="checkbox"/> |
| adding descriptive details?   | <input type="checkbox"/> | <input type="checkbox"/> |
| adding facts and examples?  | <input type="checkbox"/> | <input type="checkbox"/> |
| adding conversation?  | <input type="checkbox"/> | <input type="checkbox"/> |
| using different kinds of sentences?   | <input type="checkbox"/> | <input type="checkbox"/> |
| using clear time sequences?   | <input type="checkbox"/> | <input type="checkbox"/> |
| using my imagination?   | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Do I proofread my work to find my errors?  | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Do I rewrite some of my stories or reports after I<br>have made corrections, changes, or additions?            | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Do I have another special problem in writing?<br>What is it?   | <input type="checkbox"/> | <input type="checkbox"/> |

9. I will work on the following problem in the next few weeks:

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Teacher Signature

\_\_\_\_\_  
Date

\* Snider, Vicki. *Project Select Module J.*

## Mathematics

Students who have a learning disability in mathematics may need remediation, modifications, and adaptations. Their teachers should assess their performance to determine the specific weaknesses that will prevent their success. Some typical problems include the following: a lack of skill in fundamentals; the complex combination of fundamental skills, such as those needed for understanding fractions, decimals, or multiple operations; comprehension of word problems; a learning block based on an inability to focus attention on relevant information; and experiential, habitual, or cultural factors that relate to the problem.

A variety of equipment and materials in the mathematics classroom is necessary for all students to experience success. Manipulatives are hands-on materials—like attribute blocks, unifix blocks, and decimal blocks—that help many students master math skills. Organizational assists like graph paper (or lined paper turned sideways) help students keep numerals in proper place. Technology refers to software programs that assist in drill and practice are often more motivating than paper-pencil drill and practice. Motivational software exists in the form of games and simulated activities. Compensation comes in the form of computer and calculator skills that are valuable aids to older students unable to master basic facts and functions.

The following deficits are typical and should be the focus of a teacher's diagnostic assessment and instruction when a student with learning disabilities has difficulty in mathematics.

**Memory weakness** may hinder learning of basic math facts, operation procedures, or mathematical algorithms. Diagnosis of a memory weakness should include verification that an apparent memory deficit does not mask other weaknesses. Students should be taught memorization techniques.

**Spatial relationship weakness** may limit the ability to conceptualize quantity, distance, locations, or sequence. Assistance with this deficit includes use of concrete objects. For example, an adult can teach the concept of adding one with the use of toy cars. Teachers can purchase or make concrete objects such as attribute blocks, unifix blocks, or decimal blocks.

**Perceptual weaknesses** may interfere with following directions, sequential activities, or anticipatory functioning. Simplifying the directions and repeating the sequences will assist students who experience difficulty with this aspect of learning mathematics. By practicing anticipation, students learn to predict events. Anticipation requires creative skills that might inhibit some students. At first, tolerance of any suggested answer will help to encourage students to try to anticipate or predict. Experience will teach them what is correct or incorrect.

**Language weakness**, as a result of a language impairment or different language experience, may prevent understanding of written or oral information. Remediation of the language disability is a prerequisite. If the student has a different primary language, instruction should occur in that language until the student is proficient enough in English to converse and think in it. Teachers must remember that a difference in language is not limited to a "foreign" language, but may refer to sign language or alternative forms of English, based on ethnic or socioeconomic factors.

**Reading disability** may impede the student's ability to follow written directions, read word problems, or read text to obtain necessary information. Reading remediation must occur. Until the student's reading skills are sufficient to read and comprehend written language in mathematics, a compensatory modification must be developed.

**Cognitive weakness** may prevent the student from applying reason to problem solving. Teachers need to diagnose whether the cognitive weakness is a result of experiential differences, lack of instruction in applying cognitive strategies, or lower cognitive ability. In the final case, teachers must recognize the student's natural limitations, and higher mathematics, such as algebra and geometry, may not be appropriate. Educators must take great care in making this assumption, because it does not always apply to students with a learning disability who have average cognitive ability and such an assumption could unfairly limit this group of students.

**Metacognitive weakness** may forestall categorization, sorting, differentiating, and finding similarities which are basic to developing skills in mathematics. Many teachers in Wisconsin

have found the Kansas Learning Strategies Program, described in more detail later in this chapter, and other strategy instruction techniques useful for remediating deficits in metacognitive skills.

**Attitude or emotional blocks** may interfere with learning mathematics at any stage. Activities that truly challenge students yet provide them with positive reinforcement are necessary. In addition, students benefit from a safe climate, which includes teachers or other adults with whom they can discuss their fears or insecurities. The “band wagon” strategy used in advertising—that other people have had the same fears—can help.

**Unsatisfactory prior learning** may prevent subsequent instruction because mathematics depends on sequential learning. Task analysis will help determine which skills the student has not yet learned. Teachers may gain insight into a specific deficit if they discuss the thoughts and procedures that the students incorporate into performing a desired task with them. Error patterns should be analyzed.

## Direct Instruction Programs

In direct instruction programs, teachers carefully plan the instruction of specific skills and the lessons that accompany that instruction. They should provide simple and repetitive directions with maximum engaged time. The teacher provides continuous guidance and feedback during practice times. Figure 8 is a sample of direct instruction methodology that teaches the concept of least common multiple (LCM), using a simple and repetitive question and answer approach in its left-hand column. Once the student learns the pattern, the educator should increase its difficulty. The right-hand column is an example of a more difficult problem, the LCM of 24 and 30. When students complete the pattern, the teacher can offer advice on short-cuts by choosing a different largest number in place of the two early in the questioning stages. Students with learning disabilities need as few interruptions in their thinking process as possible, so saving unnecessary corrections until the current procedure is completed is significant to their learning. Incorrect answers require simple and direct instruction and repetitive practice.

Figure 8

LCM Exercise	
<p><b>Correct</b></p> <p>Question: What is the largest number that divides into both 8 and 12? Answer: 4</p> <p>Question: How can we divide 4 out of these two numbers? Answer: Divide it out of the largest number (12 divided by 4)</p> <p>Question: What do you get? Answer: 3</p> <p>Question: What is the LCM for 3 and 8? Answer: 24</p> <p>Question: What is the LCM for 8 and 12? Answer: 24</p>	<p><b>Incorrect</b></p> <p>Question: What is the largest number that divides into both 24 and 30? Answer: 2 (wrong, but usable)</p> <p>Question: How can we divide 2 out of these two numbers? Answer: Divide the largest number by 2 (30 divided by 2)</p> <p>Question: What do you get? Answer: 15</p> <p>Question: Is there a number that divides into both 15 and 24? Answer: Yes</p> <p>Question: What is the largest number that divides into both 15 and 24? (Repeat the pattern.)</p>

## *Connecting Math Concepts*

This six-level series is for grades 1 through 6, designed as a basal series for classroom instruction in mathematics. Students learn computation, problem solving, and mathematical thinking using the techniques of Direct Instruction. Information is presented in a systematic way with frequent review. Concepts and applications of mathematics are interrelated and provide students with guided practice in learning new skills and generalizing them to real world situations. In addition to the basic skills, this series includes geometry; estimation; calculator use; statistics; basic finance; word problems; table, chart, and data use, and interpretation. (Engelmann and Carnine, 1993)

## *Videodisc Instruction*

This new technology for grades 6 through 12 combines the use of videodisc with the concepts of Direct Instruction. Its use permits the teacher to perform two major classroom functions simultaneously. While the videodisc provides perfect instruction and demonstration of content and skills, the teacher can carefully monitor each student's performance of the skills as they are presented. The immediate feedback increases student success and motivation. The effectiveness of videodisc instruction in teaching fractions to remedial high school students and those with LD is professionally documented. (Kelly et al., 1986)

## **Consumer Mathematics for High School Students**

Consumer mathematics instruction for high school students may increase basic mathematical skills while applying concepts to real-life situations. Like the "hands-on" materials that younger students use, consumer mathematics offers high school students tangible use of their mathematics skills. A curriculum for this age group may include:

- Problem solving using a hand calculator.
- Mathematics related to earning money.
- Discussion of various jobs or careers, promotion, employee benefits, and alternative wage/salary systems.
- Percents and interest.
- Savings accounts.

- Borrowing and repaying money.
- Sales tax.
- Discounts.
- Use of a checking account.
- Long-hand calculations.
- Review of basic skills.
- Introduction of strategies to help students avoid common computational errors.
- Vocabulary development and conceptual understanding of process.

## *Affective Skills*

Affective education concerns emotional development. It includes the educational efforts related to attitudes, values, and feelings. Some students with learning disabilities have deficits in social skills. These deficits make them unable to perceive social innuendoes in their environments. As a result, they have difficulty making friends, and often teachers and other adults tend to perceive them negatively. Teaching social skills to these students must be a part of their specially designed instruction, just as reading, mathematics, or written language are. Like those academic areas, the teaching of social skills requires knowledge of a variety of methods.

Activities that involve the student in defining his or her place in a specific environment—in the family, on the playground, as part of an ecosystem—provide educators with the opportunities to teach specific social skills, such as cooperation or compromise.

Non-verbal communication can be taught through the study of comics and advertising gimmicks, as well as the use of film and video. Technology that includes audio allows students to learn how to detect emotions in voice tones.

Educators can teach social skills through learning strategies. These strategies teach students to pause and think, to consider alternative responses to social situations, and to reflect on the impact of those alternatives. Students learn self-control, self-verbalization, and self-monitoring that results in more socially acceptable behaviors.

Finally, many students need to learn the skills of conversion—that is, making friends. Teachers can develop all of these skills in their students with LD through direct instruction, prompting, modeling, rehearsal, and reinforcement. (Lerner, 1993)

Teacher sensitivity and peer reactions are elements of every student's environment and educators need to consider them when developing affective education programs for students with LD. The teaching of pro-social skills is a component of both general and special education programs.

## Structured Learning

Structured learning is a behavioral approach for providing instruction in pro-social skills. It consists of modeling, role-playing, performance feedback, and transfer of training. Each skill to be taught is first broken down into its constituent parts or behavioral steps. Students are then shown examples of people—models—performing these steps in an expert manner. Next, the students rehearse or practice the skill steps they have observed by role-playing with one another. Then they receive feedback on their performance from other students and from the group's trainers. Such feedback often takes the form of approval or praise as the role-played behavior becomes more and more like that of the model. Finally, the transfer of training involves using a number of procedures to enhance the likelihood that students will apply these newly learned skills in real-life situations.

## Self-Advocacy Skills

Self-advocacy skills are affective skills that many students with learning disabilities need to be taught. To be a self-advocate, a student must have an understanding of personal learning styles and needs. He or she must have knowledge of his or her disability and compensatory techniques for functioning in spite of that disability. The student must develop adequate communication skills including assertive information sharing, problem solving, and acceptance of constructive criticism. Self-advocacy skills are appropriate for all ages, but are critical for older students.

## Cooperative Discipline

Schoolwide discipline plans play a focal role for the effective schools of today. Student discipline and classroom management usually top the list of faculty concerns, and teachers vary their discipline styles from traditional to exper-

imental. Traditionally, teachers used an autocratic, or hands-on style of classroom discipline. But during the 1960s and 70s, equal rights movements for African-Americans, women, migrant workers, gays and lesbians, and many others caused incredible changes to filter through society. An autocratic approach that relied on submissive student behavior no longer met the needs of teachers whose students valued individual expression. Many educators swung to the opposite side of the pendulum and tried to implement a permissive, or hands-off approach to discipline. Most students, however, require a strong element of structure and routine.

Now, educators have come to a balancing point on the discipline continuum—the hands-joined approach, cooperative discipline. While it emphasizes equality, it does not mean similarity of teacher and student. The teacher and students have different responsibilities. The teacher organizes the curriculum and creates an environment conducive to learning. The student cooperates and learns. This basic description may sound no different than the traditional autocratic approach of the past. However, structured choices for students create a balance between order and freedom. Different options help both teachers and students fulfill their respective responsibilities. By offering choices and options within a learning structure, teachers respect students' rights and students can return that respect. Or as some teachers state it, "Students need to have their say, not necessarily their way." In the cooperative, hands-joined environment, both teachers and students can feel good about their choices. This enhances everyone's self-esteem.

Student behavior in the school environment is influenced by internal and external factors. Internal factors such as self-concept and motivation affect how students view themselves and their abilities. External factors such as classroom rules, routines and procedures, and academic expectations—all usually set by the classroom teacher—exist beyond the students' control.

The cooperative discipline theory, as its name implies, invites cooperation. It provides a process that not only enables the construction of up-to-date, creative, positive, and personalized solutions to discipline problems. It also fosters the building of cooperative relationships among the key participants in the school environment:

students, teachers, administrators, and parents.

Cooperative discipline is comprehensive and easy to implement. It focuses on three major questions that teachers ask themselves:

- What do I do when a student misbehaves?
- What can I do so that the student will not misbehave again right away?
- How can I encourage students who behave appropriately to continue such behavior?

The classroom teacher assumes the role of the cooperative leader, guiding students by offering choices, setting limits, and involving everyone in the process. It challenges teachers to accept the power they have in influencing students' behavior, while it builds positive relationships, as well as self-esteem, through encouragement techniques.

The cooperative discipline process not only encourages a positive relationship between teacher and student but also between teacher and parent, teacher and teacher, and teacher and administrator. The program shows concretely how parents, students, and educators can work together to solve discipline dilemmas, and it provides specific suggestions about establishing a workable partnership that can make a difference in behavior no matter what bearing environmental factors may have.

Theories become practice when the teacher develops discipline strategies specific to an individual student's needs through the completion of the five following actions:

- pinpointing and describing the student's behavior,
- identifying the goal of the misbehavior,
- choosing intervention techniques for the moment of misbehavior,
- selecting encouragement techniques to build self-esteem, and
- involving parents as partners.

Cooperative discipline is an effective system that compliments cooperative learning and cooperative schools.

The integration of students with disabilities into general education classrooms has intensified the awareness of all educators about the social development of exceptional children. To facilitate the success of the integration movement, both general education students and special education students who are low in social cognitive development may be remediated with

specific affective educational techniques (such as teaching pro-social skills) in the classroom.

For students whose affective skills involve serious behavioral and emotional problems, the Wisconsin DPI offers *A Programming Guide for Emotional Disturbance*. (Boreson, 1994) The department encourages teachers to use this excellent resource as well as consult with other educators trained in the field of emotional disturbance.

## *Physical Education*

Adapted physical education refers to modifications in the regular physical education program that allow students with disabilities to participate with their non-disabled peers. The rules and regulations developed to implement the federal law define physical education as programs to develop physical and motor fitness; fundamental motor skills and patterns; skills in aquatics, dance, and individual and group games and sports, including intramural and lifetime sports. Modifications such as length of time for participation, limit of responsibility, or extent of participation may be appropriate for some students with LD. These modifications are supplemental. Educators define more extensive modifications as specially designed physical education. Examples of these include substituting an exercise program for a unit on volleyball, or developing a preschooler's ability to catch a ball rather than teaching the child to ride a tricycle.

When working with preschool children, it is important to provide individual attention and allow them to progress at their own pace. This allows them to succeed and builds their confidence. Ending an activity while the children are still enjoying it retains their motivation for another day.

The gross motor experiences provided for preschoolers should be sequential. Simple and easily obtainable equipment, such as soft balls and balloons, jump ropes, various colored bean bags, and low balance beams are excellent items for teaching gross motor skills. (Jensen, 1994)

## *Learning Strategies*

Most adolescents with a learning disability can learn to function independently in integrated classroom settings. The role of the learning disabilities teacher is often one of support. This

role may include teaching specific strategies that will enable the students to be independent learners and performers. "Learning strategies are defined as techniques, principles, or rules that will facilitate the acquisition, manipulation, integration, storage, and retrieval of information across situations and settings." (Alley and Deschler, 1979)

## Study Skills

Specific study skills are essential to success in general education. These study skills may need to be taught to students with learning disabilities. They include location skills, general organization skills, and test-taking skills. Examples are

- dictionary skills
- library skills, or the ability to solicit help in the library
- ability to locate and use tutorial/study/enrichment centers
- familiarity with the format of texts
- use of graphic aids, such as charts and maps
- assignment notebook
- organization of notebook or folder
- time-management techniques
- note taking
- use of study guides or prepared notes
- outlining
- mnemonic devices
- color coding or highlighting
- SQ3R skills—Survey, Question, Respond, Recite, Review
- paired association
- active reading or active questioning
- reviewing for test or test preparation
- use of technology, such as videos and computers

## The Kansas Strategies Instructional Approach

The Strategies Instructional Approach is a way of selecting, organizing, and delivering curriculum. All aspects of instruction focus on teaching students how to learn and perform. Teachers accomplish this by teaching their students strategies to successfully apply skills. This process is facilitated by the strategic organization and delivery of cultural and scientific knowledge by content teachers.

The key concepts include the following:

- The most successful strategy is one that is both effective and efficient.
- A strategy is different from a basic skill or study skill.
- A strategy consists of critical guidelines related to selecting the best procedure and making decisions about its use.
- Regular and support teachers should present content in a strategic manner.
- Enhancements directly promote and model strategic acquisition, storage, and expression of information in both the support class and the content class.

The Kansas Strategies must be taught directly to the student. With collaboration between general and special educators, these strategies can be applied and reinforced in the general education classroom. These strategies cannot be learned if they are taught but never applied. The partnership of the LD teacher and the classroom teacher is essential for successful learning of strategies.

In a classroom where the Strategies Instructional Approach is used, learning is interactive, reciprocal, and driven by student goals and plans. While all teachers prompt strategic learning, the support teacher models strategic learning and provides informative feedback.

The Kansas Learning Strategies are divided into strategies and methods of the following areas: reading, mathematics, thinking, social interaction, listening, and speaking. The Strategies Instructional Approach is well-suited for an integrated exceptional and general education classroom. There are other instructional strategies but the Kansas Strategies Instructional Approach is detailed here because it is both an excellent method and it is well-known in Wisconsin. The brief description in this guide only introduces the fundamental points of the Kansas program. Teachers of students with LD who intend to use this approach should familiarize themselves with the entire program. It includes books, magazine articles, and workshops. (Alley and Deschler, 1989)

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The majority of students with learning disabilities spend most of their school day in general education classes with non-disabled peers. To experience successful learning in this environment, these students often need access to compensatory approaches, materials, or techniques. Compensation focuses on learning strategies, techniques, or systems to circumvent a deficit or disability and find a way to learn the necessary skill. The least restrictive environment requirement of state and federal law mandates that differences in treatment for students with disabilities be justified. Therefore, compensation should begin with modifications and adaptations. Compensation usually occurs after remediation. They may happen simultaneously, and in certain circumstances compensation occurs in place of remediation. This chapter describes compensatory modifications that educators can make to instruction in language; mathematics; social, emotional, and behavioral skills; and teaching and learning techniques.

## *Language*

Learning language is developmental. Most children first learn oral language in the form of receptive language skills. Eventually, they attempt to replicate the sounds that another person—parent, sibling, or other adult—models. At about the time children are ready to begin formal schooling, they have started to recognize the visual aspect of language—reading. In the early stages of reading, children attempt to replicate this visual form of language by per-

forming the tactile version—writing. Compensating for any of these skills is necessary when a disability is so significant that remediation will not occur. For example, an educator cannot *teach* a child with a sensory impairment to hear or see sounds and symbols that the senses are unable to perceive. Barring medical advancement to correct the disability, these students learn compensatory skills such as Braille and sign language.

For students with LD, alternative techniques and modified environments for learning language skills may result in compensation for the deficit, whether the deficit affects oral language, reading, or written language. Because of the critical nature of these skills, compensation should be a temporary measure only. For example, a teacher should permit a student to hear the reading material on a tape recorder when the goal of the activity is to learn the content. A parallel goal, however, must be the remediation of the reading disability.

Other compensatory strategies in language include the following:

**Cooperative learning.** Students with skills work cooperatively with students without the needed skills. This is similar to how adults work cooperatively on certain goals, with each one contributing to the joint effort, offering individual strengths and depending on others to compensate for individual weaknesses.

**Peer tutoring.** This is similar to cooperative learning but involves pairs of students, one who teaches and one who learns.

**Partner reading.** Students take turns reading to each other. Teachers sometimes overlook the importance of learning activities in oral and silent reading. This strategy provides academic engaged time in these skills.

**Highlighted texts.** Teachers highlight information so the student reads only selected parts of each page, learning the most important information.

**Electronic spell checking.** This technology corrects spelling errors and saves valuable academic engaged time.

**Word processing.** A word processor can motivate a hesitant writer and compensate for poor handwriting skills, a common occurrence in students with LD.

**Taped authorship.** A student records the information rather than writing it as other students do.

**Shortened assignment.** Students complete less homework than their classmates. When using this strategy, teachers should select problems or activities throughout the assignment rather than assigning only the first activities, which tend to be the easiest ones.

**Extended time.** The teacher provides additional time for assignment completion.

**Multiple sittings.** The teacher permits the student to break long activities into smaller ones. For example, a student completes a one-hour assignment in four different 15-minute sittings.

**Alternative materials.** The student uses a similar text with a lower reading level requirement.

**Oral activities.** Class discussions, teacher lectures, and other oral activities supplant reading assignments for the strong auditory learner.

**Invented spelling.** The teacher accepts alternative spelling to encourage ideation.

**Alternative products or outcomes.** The teacher permits graphics, illustrations, or other art in place of written language to express ideas.

**Modified evaluation systems.** The teacher uses portfolio or some other kind of authentic

assessment; or grades on the basis of growth, rather than competitive grading.

**Books on tape.** Textbooks or other materials are recorded on audio tapes, permitting students to listen to the content. Many materials are available from Recording for the Blind. (See appendix A.)

**Authentic learning.** The teacher limits the required reading to only the information that a student needs or wants to know. Glasser (1993) identifies four categories of information that teachers and students understand as important to learn:

- information directly related to a life skill, such as grammar, multiplication tables, or handwriting.
- information the student wants to learn.
- information that the teacher believes is especially useful. Glasser describes this as learning that is so motivating to the teacher that his or her dedication to it is transferred to the student, and results in the student choosing to learn it and accepting its value based on the teacher's commitment to it.
- information required for college. This applies only to those students who will continue in postsecondary education programs.

## *Mathematics*

As in language, students with severe learning disabilities in mathematics require compensatory activities only on a temporary basis and in conjunction with remedial efforts. Life skills in mathematics require a minimum of skills that must be taught in a useful manner. Compensatory activities that allow a student to continue to learn mathematics content include using calculators and computers to assist in numerical manipulations while the student applies typical reasoning skills to problem-solving activities.

Other compensatory techniques include

- the use of graph paper or lined paper turned sideways to assist the student in lining up the numbers to be calculated;
- the use of concrete objects or manipulatives, such as decimal and unifix blocks that provide visual and kinesthetic description of the numerical manipulation; and
- the relation of new material to material learned previously. For example, a teacher

might ask a student, How is multiplication a form of addition? How are using decimals like manipulating amounts of money? How are percents like ratios?

For some students with LD in mathematics, the disability will inhibit problem-solving activities. For these students, compensation may come in a variety of forms, many of them similar to those mentioned above, including

- simplification of the statements and information provided in the problem;
- a "cookbook" format for problem solving that allows the student to simply fill in the blanks that will lead to the solution;
- computer-assisted mathematics programs;
- alternative materials or authentic learning (Money problems, scheduling, and measurement are all mathematics learning that realistically reflect the student's knowledge base, experience, or life goals.);
- relation of new material to material learned previously;
- extended time for completion;
- shortened assignments;
- partner problem solving (pairing of a good problem solver with a good manipulator of numbers);
- oral or tape-recorded presentation of problems; and
- use of visuals to define the problem.

## *Social, Emotional, and Behavioral Skills*

Many students with learning disabilities lack good social skills. Their perceptual weaknesses extend to this domain, creating difficulties in making good judgments, perceiving others' behaviors, making friends, responding to authority figures, and developing a good self-concept.

The general education environment is the optimal place to implement strategies in the student with LD that will foster sound social skills. Students whose prior experience in education includes failure and frustration need encouragement, trust, optimism, and high expectations. These qualities have higher value when they come from the general educator than when they come from the specialist who the student expects will create such a supportive environment. Teachers who use compensatory strategies in behavioral skills often

• sincerely praise and encourage students whenever possible.

- collect student work as soon as possible.
- help students organize and use assignment sheets.
- do not demand that work be redone due to lack of neatness if the content is correct. This strategy allows the student to feel success, and work on neatness as a separate issue.
- mark correct or acceptable work rather than mistakes.
- reserve corrections until they have private time with the student, if possible.
- provide directions in small, distinct steps.
- vary length and complexity of assignment to individual student performance rate.
- vary the level of classroom questions to include both concrete and abstract concepts.
- provide the student with LD some advance warning before calling on him or her, using proximity or some other predetermined cue to indicate when the student will be selected to respond.
- provide study guides for note-taking or test preparation.
- supplement verbal instructions with written assignment sheets.
- define success clearly.

Teachers could take a cue from jigsaw puzzles. They are much easier to put together when a picture of the final product is available. Likewise, a learning activity is much easier to complete when students know its final appearance.

## *Teaching and Learning Techniques*

In comparison to proficient learners, students with learning disabilities are less able to regulate their learning. These students frequently are characterized as being less aware of

- themselves as learners, and thus unable to identify situations that are difficult for them, such as taking multiple choice versus essay tests;

- demands presented by different tasks, such as what is involved in reading a chapter in a science book to study for a test versus reading a novel for pleasure;
- strategies to help themselves learn, such as summarizing, self-questioning, and predicting.

Teachers who see teaching as a learning activity that is student-centered rather than as an instructional activity that is teacher-centered will provide students with authentic learning opportunities and will offer their students greater success. Strategy-learning or self-regulation requires more than mastery of skills. Four criteria distinguish the learning of skills from the learning of strategies:

**Intentionality.** Skills exist as “automatic routines,” but learners select and employ strategies based on the demands of the task and their own personal characteristics.

**Cognitive sophistication.** Skills are low level and require little reasoning or problem solving, but strategies involve both reasoning and problem solving.

**Flexibility.** While learners apply skills rather rigidly, they modify strategies to match their needs.

**Awareness.** Using skills requires little awareness and reflection, while using strategies involves at least the ability to reflect on the effectiveness of them.

Students who are self-regulated are able to learn in a strategic manner, applying strategies in relationship to their own characteristics as well as specific task demands. Becoming more strategic and self-regulated in their learning is an important goal for many students with learning disabilities. Teachers who provide strategy training and reinforcement will see more success in skill development that will result in lifelong learning.

## **Cognitive and Metacognitive Strategies Instructions**

One approach to teaching self-regulation is cognitive strategy instruction. Currently, several models of strategy instruction result in success in helping students become more self-regulated. There are five steps involved in strategy instruction.

### *Assess Strategy Use*

To determine if students are aware of strategies and able to successfully use them, teachers should ask students to “think aloud” or to share their thinking. Inviting them to tutor younger

students allows the teacher to listen to the advice they give. Several paper and pencil tests and interviews can be used to determine the students’ ability to self-regulate.

### *Explain the Strategy*

Teachers need to include three kinds of knowledge about strategies in instruction. The first is declarative knowledge, or knowledge of what strategies are being learned. The second is procedural knowledge, or how to use the strategies. The third is conditional knowledge, or knowledge about when and why to use the strategies. It is critical that teachers help students develop all three types of knowledge about the strategies they are learning.

### *Model the Strategy*

Students can learn self-regulation by observing and discussing strategy use, choice of strategies, and ways of implementation. Modeling strategies is most powerful when it is done in the context of real problems and tasks that require strategic approaches.

### *Scaffold the Strategy*

“Scaffolding” is a procedure that supports students while they attempt to use strategies to meet the demands of particular tasks. This support can exist in many forms. One of the most powerful forms is to engage the student in conversation about their learning, especially what they are learning and how they are learning it.

### *Relate Cognitive Strategy Instruction to Motivation*

It is difficult for students to be motivated when they do not have the means to control their learning. As students become more aware of and able to use strategies to control their learning, they have a basis for increased belief in their ability to make a difference—a belief that is strongly linked to increased motivation. (Palinscar and Klenk, 1992)

Not all strategies are effective for all learners; one must consider adults’ varying strategies for cleaning their homes. Classrooms that involve open sharing of strategies, discussed in relation to particular task demands; learner characteristics; and personal preferences, set

the stage for students to become more conscious of, and interested in, self-regulated learning. Students with learning disabilities, so often characterized as non-strategic learners, can benefit greatly from these types of classrooms.

## Learning Styles

The term *learning styles* refers to the elements that affect how one learns. The most common are visual and auditory. Other relevant factors affect individual learning needs and styles.

To plan for a learning activity based on styles, a teacher should

- identify the topic, concept, or skill;
- list the things about the topic that every student should learn and translate them to behavioral objectives;
- design three or four activity alternatives for each objective, allowing students to select the conditions (learning style) under which they will perform;
- create a reporting alternative for each of the activity alternatives;
- list the resources the student may use;
- add at least three small-group techniques;
- develop a test that is directly related to each objective. (Dunn and Dunn, 1978)

Figure 9, "C.I.T.E. Learning Styles Instrument," is a tool that teachers can give to or use with students to establish an understanding of their individual learning styles. Figure 10 provides a scoring key for the C.I.T.E. assessment tool.

## 4MAT

The 4MAT system is based on the belief that people learn in different ways and that by using various instructional strategies, teaching and learning can improve. The eight-step cycle of instruction makes teachers aware of learning styles and assists them in organizing lessons to meet the needs of students.

Step One: Create an Experience

Step Two: Reflect on and Analyze the Experience

Step Three: Integrate the Reflective Analysis into Concepts

Step Four: Develop Concepts and Skills

Step Five: Practice Defined Givens

Step Six: Practice and Add Something of One-self

Step Seven: Analyze Application for Relevance and Usefulness

Step Eight: Do and Apply to New, More Complex Experiences (Weber and Weber, 1990)

Four types of learners are recognized in the 4MAT program:

- Imaginative Learners
- Analytic Learners
- Common Sense Learners
- Dynamic Learners

Imaginative learners are interested in personal meaning and teachers need to give these students reasons to learn. Analytic learners are interested in fact and teachers need to give these students the information. Common sense learners are interested in how things work and teachers need to let them experiment. Dynamic learners are interested in self discovery and teachers need to let these students teach themselves and others.

Teachers sequentially apply all four of the learning styles mentioned above so all students will be comfortably successful at least part of the time. The 4MAT system also incorporates the whole brain learning theory and, at each step of the cycle, stresses a right mode and left mode technique. The system contains strategies that will meet the needs of all students. (McCarthy, 1990)

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Figure 9

### C.I.T.E. Learning Styles Instrument\*

Directions: For each statement, check the box that best shows how you do your work.

	most like me 4	3	2	least like me 1
1. When I make things for my studies, I remember what I have learned better. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Written assignments are easy for me to do. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I learn better if someone reads a book to me than if I read silently to myself. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I learn best when I study alone. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Having assignment directions written on the board makes them easier to understand. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. It's harder for me to do a written assignment than an oral one. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. When I do math problems in my head, I say the numbers to myself. ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. If I need help in the subject, I will ask a classmate for help. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I understand a math problem that is written down better than one I hear. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I don't mind doing written assignments. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I remember things I hear better than things I read. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. I remember more of what I learn if I learn it when I am alone. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. I would rather read a story than listen to it read. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. I feel like I talk smarter than I write. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. If someone tells me three numbers to add, I can usually get the right answer without writing them down. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. I like to work in a group because I learn from the others in my group. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Written math problems are easier for me to do than oral ones. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Writing a spelling word several times helps me remember it better. ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. I find it easier to remember what I have heard than what I have read. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. It is more fun to learn with classmates at first, but it is hard to study with them. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. I like written directions better than spoken ones. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. If homework were oral, I would do it all. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. When I hear a phone number, I can remember it without writing it down. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. I get more work done when I work with someone. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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## C.I.T.E. Learning Styles Instrument

	most like me 4	3	2	least like me 1
25. Seeing a number makes more sense to me than hearing a number. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. I like to do things like simple repairs or crafts with my hands. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. The things I write on paper sound better than when I say them. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. I study best when no one is around to talk or listen to. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. I would rather read things in a book than have the teacher tell me about them. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. Speaking is a better way than writing if you want someone to understand what you really mean. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. When I have a written math problem to do, I say it to myself to understand it better. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. I can learn more about a subject if I am with a small group of students. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. Seeing the price of something written down is easier for me to understand than having someone tell me the price. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. I like to make things with my hands. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. I like tests that call for sentence completion or written answers. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. I understand more from a class discussion than from reading about a subject. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. I remember the spelling of a word better if I see it written down than if someone spells it out loud. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. Spelling and grammar rules make it hard for me to say what I want to in writing. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. It makes it easier when I say the numbers of a problem to myself as I work it out. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. I like to study with other people. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41. When the teachers say a number, I really don't understand it until I see it written down. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42. I understand what I have learned better when I am involved in making something for the subject. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43. Sometimes I say dumb things, but writing gives me time to correct myself. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44. I do well on tests if they are about things I hear in class. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45. I can't think as well when I work with someone else as when I work alone. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Figure 10

## C.I.T.E. Learning Styles Instrument Score Sheet\*

Directions: The numbers below correspond to the numbered statements from the C.I.T.E. Learning Styles Instrument. Write in the student's numerical response to each statement and use the formula and key, provided below, to determine the significance of the learning style.

### Visual Language

5 \_\_\_\_\_  
 13 \_\_\_\_\_  
 21 \_\_\_\_\_  
 29 \_\_\_\_\_  
 37 \_\_\_\_\_  
 Total \_\_\_\_\_ x 2 = \_\_\_\_\_ (score)

### Social-Individual

4 \_\_\_\_\_  
 12 \_\_\_\_\_  
 20 \_\_\_\_\_  
 28 \_\_\_\_\_  
 45 \_\_\_\_\_  
 Total \_\_\_\_\_ x 2 = \_\_\_\_\_ (score)

### Visual Numerical

9 \_\_\_\_\_  
 17 \_\_\_\_\_  
 25 \_\_\_\_\_  
 33 \_\_\_\_\_  
 41 \_\_\_\_\_  
 Total \_\_\_\_\_ x 2 = \_\_\_\_\_ (score)

### Social-Group

8 \_\_\_\_\_  
 16 \_\_\_\_\_  
 24 \_\_\_\_\_  
 32 \_\_\_\_\_  
 40 \_\_\_\_\_  
 Total \_\_\_\_\_ x 2 = \_\_\_\_\_ (score)

### Auditory Language

3 \_\_\_\_\_  
 11 \_\_\_\_\_  
 19 \_\_\_\_\_  
 36 \_\_\_\_\_  
 44 \_\_\_\_\_  
 Total \_\_\_\_\_ x 2 = \_\_\_\_\_ (score)

### Expressiveness-Oral

6 \_\_\_\_\_  
 14 \_\_\_\_\_  
 22 \_\_\_\_\_  
 30 \_\_\_\_\_  
 38 \_\_\_\_\_  
 Total \_\_\_\_\_ x 2 = \_\_\_\_\_ (score)

### Auditory Numerical

7 \_\_\_\_\_  
 15 \_\_\_\_\_  
 23 \_\_\_\_\_  
 31 \_\_\_\_\_  
 39 \_\_\_\_\_  
 Total \_\_\_\_\_ x 2 = \_\_\_\_\_ (score)

### Expressiveness-Written

2 \_\_\_\_\_  
 10 \_\_\_\_\_  
 27 \_\_\_\_\_  
 35 \_\_\_\_\_  
 43 \_\_\_\_\_  
 Total \_\_\_\_\_ x 2 = \_\_\_\_\_ (score)

### Kinesthetic-Tactile

1 \_\_\_\_\_  
 18 \_\_\_\_\_  
 26 \_\_\_\_\_  
 34 \_\_\_\_\_  
 42 \_\_\_\_\_  
 Total \_\_\_\_\_ x 2 = \_\_\_\_\_ (score)

### Key

Score: 33 - 40 = Major Learning Style  
 20 - 32 = Minor Learning Style  
 5 - 19 = Negligible Use

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Students with learning disabilities have areas of strength. Some of those areas are obvious in academic settings and achievement tests, while others manifest themselves in co-curricular or extra-curricular areas. Unfortunately, some parents and educators overlook these areas of strength and focus on the disability. Enrichment programs, educational activities that generate meaningful use of information, are an essential part of the educational opportunities provided to all students. As an integral support to remediation and compensation, enrichment activities focus on the actual content of the lesson, making it more real for the student and thus motivating her or him to strive to succeed. For students with disabilities who also have special strengths or talents, enrichment programs can discover or develop skills that the student may carry into adulthood.

## *Literature, Writing, and Communication*

While students with learning disabilities are most likely to be disabled in the areas of reading and written language, occasionally students manifest their skills in these areas and should develop them. Such skills include comprehension of and compassion for literature and the written word. Teachers should guide and develop these skills in students, providing them with accommodations that allow an individual's potential to surface. Students with LD may be good auditory learners. Their efficient auditory learning skills may result in the acquisition of

large amounts of information, which they can then develop. Enrichment programs in literature should provide students with LD the forum to discuss and contemplate topics and issues heard on news shows and documentaries. Such auditory learning opportunities provide meaningful information, but teachers may overlook them as sources for classroom discussions, projects, or other activities.

While students with LD may demonstrate weaknesses in such areas as vocabulary and spelling, they may have potential in the verbal domain. Public speaking and marketing skills are not atypical of a person with a learning disability. As these skills develop, the student will seek to improve vocabulary and reading skills in order to enhance the content of the presentations. Technology, such as word-processors, often is the key to unlocking the hidden talents of these students.

Sample topics and activities that will help improve reading and vocabulary skills might include

- play writing
- solving mysteries
- analyzing court cases
- discussing implications of a new law, especially one that affects young people
- word-processing activities
- creating a public relations campaign to build a local swimming pool
- interviewing a candidate for the school board
- designing a brochure on dental hygiene
- participating in a Junior Great Books group (Junior Great Books Curriculum, 1994)

## *Mathematics, Science, and Computers*

Many students with LD have strong mathematics skills. Teachers should encourage and support them as they continue to work within the mainstream of the school's mathematics curriculum. In addition, their program must include modifications that will compensate for fine motor weaknesses, perceptual skill deficits, and other aspects of the disability that interfere with a student's ability to demonstrate individual knowledge. Many students with LD also develop strong computer or science skills.

Enrichment activities in mathematics, computer, and science domains could include advancement through the curriculum at a faster rate than average; application activities such as data analysis for school, community, or university purposes; assistance in research; or guided independent research. Numerous programs are available in hard copy and on computer software. Often the best projects, however, develop through the joint efforts of the student, the teacher, university staff, or other community members.

Sample activities might have the student

- analyze contradictions in environmental current events,
- establish an aquarium or insect collection,
- study a famous person and share the information with others in a report,
- conduct science experiments,
- design a chart or graph on computer,
- write a story (using pictures only or both words and pictures) on a computer,
- create an advertising program to justify a tax increase, or
- list consequences of destroying the rain forest.

## *Visual Arts and Performing Arts*

Many students with LD are talented in the arts, which include pottery, photography, and woodworking, among others. These often prove to be their most obvious talents and, as potential career and vocational skills, deserve development. The same is true for mechanical skills, drafting, designing, music, and drama. Physical skills in athletic areas, dance, manipulation of equipment and machines, performing arts,

and others may be among the strengths of students with learning disabilities.

Sample activities may have the student

- create a sculpture depicting contributions of African-Americans during the Harlem Renaissance,
- develop a slide show on child-proofing a home,
- design a quilt or afghan that provides a family history,
- perform a song typical of American Indian culture, or
- find and share examples of Laotian crafts.

Arts education has a variety of benefits for all students. For those with LD, art programs reinforce necessary skills, some of which include visual memory, figure-to-ground relationships, and time and sequence. For activities that relate to these and other developmental needs, see the Wisconsin DPI's publication *A Guide to Curriculum Planning in Arts for EEN Students*. (Ross-Thomson, 1990)

## *Social Sciences, Business, and Economics*

Students with learning disabilities may demonstrate high interest in the social sciences because often these topics relate to the students' personal experiences. For instance, a student's disability may emphasize an exploration of emotional needs, leading to an interest in psychology. Concern about possible contact with the law enforcement system may become a career in criminology. Gerontology may attract the student with LD who has discovered that older adults, with their greater experience and possibly broader perspectives, often are more patient with children who have LD. Genealogy is a logical interest for the child with LD who finds that, within the family, the disability always is secondary to family membership. Similarly, business and economics can appeal to students who have helped a relative or friend operate a small business, are fascinated by the stock market, or hold their own savings accounts. A functional curriculum emphasizes actual experience, and the careful, limited use of a functional curriculum, or several of its key elements, may be helpful to teachers in the area of social science, business, or economics. These subjects often have many "real-world" or hands-on activities.

Schloss and Sedlak (1986) suggest that the functional curriculum is appropriate for students with great difficulty learning new skills, trouble keeping pace with their peers in acquiring a number of new skills, limited time to engage in instructional activities, or are at the end of their school experience. The functional curriculum has merit for older students with LD whose disability is quite severe, in that it aims to provide the basic skills needed to function independently and to compete for certain jobs. These skills should be built into the general curricula where students can practice addition and subtraction by balancing checkbooks in consumer economics, improve their communication skills by writing business letters, and fill out forms and practice interviews in a variety of classes.

## Cognitive Domain

Students with LD have normal intellectual ability in order to qualify for exceptional educational services. That does not mean, however, that students with high cognitive ability cannot be learning disabled. It is reasonable to believe that the same proportion of learning disabilities exists within each range of intellectual ability. Students who are intellectually gifted and learning disabled will likely require services from both the gifted and talented program and the LD program. These students will likely participate in both enrichment activities and special accommodations in the general education classroom.

Frank Williams, an author in the field of education, categorizes three types of activities for enrichment, which address various cognitive skills:

- Exploration activities, which include paradoxes, analogies, provocative questions, and attributes;
- Training activities, which include searching skills, study of creative people or processes, evaluation of situations, and idea generation from creative reading, writing, or listening;
- Production activities, which include tolerance for ambiguity, intuitive expression, and evaluative skills based on the analysis of consequences and implications, creative writing, and visualization. (Williams, 1970)

## Affective and Social Domain

Finally, students with LD may need enrichment in the area of affective skills and the social domain. As individuals with disabilities, they may be empathetic and understanding individuals. They may develop strong skills in self-discipline and taking responsibilities. Teachers need to respect and reward these skills because they may be the very skills that compensate for disabilities. There is often an erroneous assumption about physical disabilities that a "natural" compensation exists for a lost sense, for example, better hearing for the student who is blind. While this may be the same for people with learning disabilities, such compensations do not always exist.

Students with LD usually experience extremes in self-esteem. While they recognize their strengths, their disabilities often overwhelm them. The disabilities can eventually control students' attitudes toward themselves, and this often results in low self-esteem. For that reason, it is important that parents and educators recognize a student's strengths and talents, because they lead to a student's potential to develop a disciplined and responsible attitude toward learning and work. While knowledge and skills are important, proper attitude is essential. Without it, students have little opportunity to use their skills and knowledge.

Enrichment activities are part of every curriculum. They are often the key to unlocking the psychological or emotional cells that imprison students with disabilities.

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# Establishing the Assessment Process

# 6

Educational assessment, the process of determining the relative significance of the factors that affect learning, is an integral part of the overall learning process. While educators use assessment for identification of, and placement for, a learning disability, assessment's most valuable purpose is instructional programming. Assessment provides a description of the student as a learner in a variety of environmental settings and should result in empirically based decision making that leads to increased student learning.

All effective educational assessment includes formal and informal practices such as observations, interviews, normative testing, curriculum based assessment, criterion referenced testing, and others. It is an ongoing process that involves the collaborative efforts of the students, parents, and teachers. Evaluators and educators should always emphasize the skills and knowledge that the student has and can demonstrate. The identification of deficits is secondary. Yet, it is not sufficient to merely describe the student's strengths and weaknesses. Teachers must base assessment on the premise that the student does not have sole ownership of the learning problem. Teachers, instructional settings, instructional approaches, instructional materials, family and community dynamics, and a variety of other factors all share the ownership of, or play a significant role in, the learning problem. The evaluators must assess how the student functions in various environmental settings and conditions, such as the home, the

community, lecture classes, small group activities, one-to-one encounters, and so on.

Assessment is a team process that includes a well-planned sequence of events. These teams should be made up of diverse adults who represent various facets of the student's educational and personal life. (In Wisconsin, the team is referred to as a multidisciplinary team (M-team), and Wisconsin law refers to the need for special education as Exceptional Educational Need (EEN).) The assessment process enables parents and educators to obtain pertinent information efficiently and to apply that information for effective student learning. If the assessment team determines the need for special education services, another group meets to create an individualized educational plan (IEP) for the student.

Overall, the assessment process requires that evaluators take the following four fundamental actions

- analyze the status quo,
- collect needed information,
- analyze and synthesize information, and
- apply new information to students' learning needs.

The initial assessment team performs the first three fundamental actions: analyzing the status quo, collecting the needed information, and analyzing and synthesizing the information, while the IEP team performs the fourth evaluative action, applying new information. Both groups work to ensure that a special education student receives the kind of education

that is appropriate for his or her individual needs.

Federal laws define learning disabilities and establish criteria for them. Wisconsin laws also define LD and establish certain criteria, which the U.S. Department of Education has approved. This section on the assessment process provides information that applies to all public schools in the U.S. Although this chapter discusses several Wisconsin requirements, specific statutory information relative to Wisconsin educators appears in appendixes B, C, and D. These appendixes on Wisconsin's eligibility, M-team, and IEP rules also include helpful interpretations.

### *Federal Definition*

The federal Individuals with Disabilities Education Act (IDEA) defines learning disabilities in its related Code of Federal Regulations, 34 CFR 300.7(b)(10):

'Specific learning disability' means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not apply to children who have learning problems that are primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage.

Federal regulations also offer criteria for educators to apply when determining the existence of a specific learning disability. The assessment team must determine that the student's learning experience is appropriate for his or her age and ability. If the student does not achieve in certain areas commensurate with his or her age and ability, there may be reason to determine that a learning disability exists. The areas where a severe discrepancy between achievement and intellectual ability may indicate LD are the following:

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

The team may not identify a child as having a learning disability if a severe discrepancy between ability and achievement is primarily the result of the following:

- a visual, hearing, or motor impairment;
- mental retardation, (referred to in Wisconsin as *cognitive disability*)
- emotional disturbance; or
- environmental, cultural, or economic disadvantage. (34 CFR 300.541)

The federal definition is general and applies to all states. Each state may develop its own statute and administrative rule to more specifically define the categories and criteria for LD.

Figure 11, "Federal and Wisconsin LD Definitions," provides a comparison of the federal definition and operational criteria to those of Wisconsin. For more information about Wisconsin's criteria, see appendix B.

<b>Federal and Wisconsin LD Definitions</b>				
<b>Deficits</b>	<b>Federal Definition*</b>	<b>Operational Criteria</b>	<b>Wisconsin Definition</b>	<b>Operational Definition</b>
<b>Under Achievement</b>	Intra-Individual	"achievement and intellectual ability"	"Disorder within the child"	"functional achievement and expressive achievement" (= 50% Formula I.Q. Cut-off)
<b>Central Nervous System Dysfunction</b>	Yes	None	No	"Deficit within the child's learning system"
<b>Process Clause</b>	Yes	None	No (implied)	
<b>Life Span</b>	Yes	Refers to "children"	Yes	Refers to "children"
<b>Language</b>	Yes. Spoken, written Listen, read, speak, write, spell, calculate	Spelling not included	Yes. "acquire, organize, or express information" "read, write, spell, or arithmetic reason/calculating"	Spelling included
<b>Academic</b>	Yes	One or more areas: Oral expression listening comprehension written expression basic reading reading comprehension mathematics calculation mathematics reasoning	Yes	Two or more areas: math, reading, spelling, written language, or readiness areas
<b>Thinking</b>	No	No reference	No (implied)	Normal intelligence
<b>Other</b>	Includes perceptual HC brain injury MBD dyslexia developmental aphasia	None	None	Also exclude high potential when functioning at grade level
<b>Allows Multi-handicapped</b>	Yes	Yes	No reference	Yes
<b>Exclusion</b>	Yes	Yes	No	Yes

\* Adapted from D.D. Hammill, "On Defining Learning Disabilities: An Emerging Consensus," *Journal of Learning Disabilities*, (Feb., 1990).

## *Kinds of Assessment*

The following brief descriptions of different kinds of assessment offer educators various strategies to determine a student's abilities. No one kind of assessment is primary or indispensable. They are listed alphabetically. Educators can and should use them in collaboration with one another for the best possible results.

### **Authentic**

Authentic or natural assessment involves observation and direct inquiry of the student as he or she performs a specific skill. Whether it is "hands-on" experience in a science experiment, dialogue about a character in literature, a holistic writing activity, or a cooperative review of safety rules for operating machines, authentic assessment is an ongoing component of instruction. It focuses on the outcomes of learning and provides increased accountability for instruction.

### **Curriculum-Based**

Curriculum-Based Assessment (CBA) involves a teacher or an assessment team collecting short, repetitive samples of student behavior within one or more curricular areas. The evaluator(s) use that collection to interpret and determine the student's relative strengths and weaknesses when functioning in that curriculum. An example of curriculum-based assessment in oral reading is the random selection of 100-word passages from the basal reader or literature textbook that the student uses in the general education classroom. The student's fluency and accuracy, in terms of the number of words read correctly per minute, constitutes the assessment data. Evaluators may collect similar measures in the areas of reading comprehension, spelling, written expression, mathematics, and other areas. Social behaviors may be assessed by observing and recording the frequency of different behaviors such as "out of place," "on task," or "negative physical contact." To be useful, such data should always be compared to like data collected about other students.

The advantages of CBA include the following:

- assessment data are related directly to instruction.

- frequent testing may enhance learning by providing specific feedback to students.

- CBA is time efficient.

- continuity and a relevant data base is established for decision making.

- clear relationships exist among assessment, IEPs, and instructional delivery.

Teachers who develop the CBA "tools" should be familiar with the scope and sequence of the relevant curricular area. The value of the data obtained from this assessment will depend on the extent to which the CBA tool is consistent with the expectations of the curriculum and the environment of the actual classroom. Evaluators need to know the percentage of the population that is minority, disadvantaged, and disabled, and be able to describe age, gender, socioeconomic status, and other important elements of the population.

### **Developmental**

Educators compile a developmental history by reviewing the student's past records, interviewing the parents, and obtaining any necessary medical information. This type of information points to specific patterns, mainly of delays or disorders that occur over a period of time. It is important to study profiles from previous interventions, including test scores obtained prior to those interventions. The developmental assessment process is a fact-finding mission that includes an analysis of all aspects of a student's past and present performance. Even when an impairment exists, the team needs to determine if that impairment significantly interferes with the student's ability to operate on a developmental level commensurate with his or her peers. The areas of development most commonly assessed in young children are cognition, communication, gross motor, fine motor, social or emotional, functional (or basic) skills, and adaptive or self-help skills. All areas of development including vision and hearing must be assessed. Developmental assessment is especially important for younger children and those suspected of having a traumatic brain injury (TBI). These two groups of children are progressing through critical stages of development because of their age or injury, so the evaluator needs to know all possible developmental factors in order to make a complete and valid assessment.

## Diagnostic Teaching

Diagnosis through teaching is a procedure in which a teacher uses a variety of strategies to identify a student's learning style, strengths, and weaknesses. The teacher creates activities that determine the reason a student learns in a certain way.

For example, a teacher may create a lesson that substitutes symbols for words and write several messages for the student to interpret. The teacher allows the student a very brief time to study the symbol key, in which some words are represented by concrete pictures and others are more abstract. The teacher then asks the student to interpret some simple sentences. If the student recognizes only those symbols that provide a picture of an object and cannot remember the more abstract symbols, the teacher can diagnose that the student is a concrete learner. Diagnosis through teaching should *not* be interpreted as a diagnostic placement. When used as a part of a formal evaluation, diagnostic teaching should not result in *de facto* placement in special education. Diagnostic placements are not allowable under Wisconsin's rules.

Both general and special education teachers may use diagnostic teaching. It allows the teacher and student to assess together the current learning environment to determine the specific area of difficulty. The teacher and student need to analyze the student's attributes that affect his or her success in learning the specific task. Because most tasks require prerequisite skills, the lack of those skills is often the cause of the problem.

In addition to this common gap, an important attribute is the student's perception of his or her own abilities, in terms of an external rather than internal focus. This question of focus addresses the fact that many students with learning problems believe their academic success hinges more on factors outside of their control—such as luck or innate ability—than on factors within their control, like effort. Finally, the organizational learning or cognitive strategies that the student applies to learning the task may also be the cause of the problem. This form of diagnostic teaching allows the teacher to determine other student alternatives, such as the need for compensatory devices, like calculators or word processors. Differential diagnosis may rule out the following:

- distracting stimuli.
- slow learner characteristics.
- anxiety.
- motivation.
- inappropriate instruction.
- lack of instruction.

Diagnostic instructional strategies may guide a teacher's planning by

- determining a student's awareness of how he or she learns.
- determining strategies used by a student.
- testing hypotheses regarding a student's learning.
- developing instructional objectives.
- analyzing discrepancies.
- determining a student's thinking skills in relation to life-long learning.
- obtaining evidence of success with various instructional strategies.

## Portfolio

Portfolio assessment is used in a variety of ways. Teachers assist students in developing portfolios that demonstrate the skills they have mastered. Portfolios may contain art work, writings, projects, project plans, resumes, work samples, letters of commendation or recommendation, and other evidence of the student's skills. Portfolio assessment plays a significant role in learning that focuses on relevant outcomes.

## Standardized/ Norm-Referenced Tests

Traditional assessment in special education includes the use of formal standardized and normative referenced tests. These tests are developed and tested on a sample population of students. These samplings allow the test developers to describe how valid or reliable the obtained information may be when using a specific test with a specific student.

Formal tests are not always normative referenced, but may be criterion referenced. Criterion-referenced tests are not normed on a population of students and do not provide data that compares a student's achievements to those of peers. Instead, criterion-referenced tests compare a student's achievements to a predetermined curriculum, or set of criteria.

Developers revise these tests regularly. Teachers should remain aware of current literature that evaluates assessment tools. Rather than include an appendix or listing in this DPI publication, the author refers readers to two well-known resources that maintain up-to-date information about assessment tools: *Assessment in Special and Remedial Education* (Salvia and Ysseldyke, 1991) and *Buros Mental Measurements Yearbook*. (Buros Institute, 1994)

## Team

In a team assessment, members of a multidisciplinary assessment team and other participants work together to determine needed information, to plan the evaluation sessions, and to carry out designated roles to gather the needed information. Parents participate in each step in the diagnosis. The advantages of team assessment include

- elimination of redundancy,
- improved understanding of the interrelation of the child's abilities, and
- active parent participation.

Assessment sessions may involve the team observing a parent or other team member interacting with the child. The team may observe as the child interacts with numerous toys or specific items. While primarily used with young children, team assessment may be used with any student. Observation by a team of the student in a testing situation is another form of team assessment.

## Transdisciplinary

Transdisciplinary assessment (TA) focuses on the whole person. Functional activities are seen as part of a whole rather than as component skills learned in isolation. Transdisciplinary team members cooperate to plan, evaluate, and synthesize information to develop a holistic view of the person in question. Emphasis is placed on sharing responsibility for educational programming by sharing information and skills across traditional disciplinary boundaries. TA generally results in one or two individuals facilitating the delivery of services while other team members serve as consultants to them.

## Whole Language

Whole language assessment is holistic, student-centered, and process-oriented. Its tech-

niques emphasize content, and use frequent, unlimited writing assignments in a contextual framework. It may involve a portfolio which includes a student's writing sample, audio and video tapes, think-aloud protocols, files, albums, journals for conferences, tally lists, reading logs, anecdotal records, and story frame checklists. It may involve direct observation or an interview that determines the student's application of reading skills and strategies to academic and recreational reading. Parental participation and self-evaluation are often significant components

## Analyze the Status Quo

The purpose of assessment is to guide decision making for student programming. The following steps that the multidisciplinary assessment team members should consider will assist the team in analyzing the status quo.

## Review Existing Records

The first step in any assessment is to review behavioral files, pupil records, and any other historical data about the student. Relevant information includes the following:

- vision and hearing test results,
- current and previous academic and behavioral information,
- school attendance patterns,
- medical information,
- family and environmental background,
- standardized test results (an example for Wisconsin educators is the Third Grade Reading Test), and
- any other pertinent facts.

After reviewing and analyzing the student's records, evaluators must determine what additional information they will need to make a valid assessment. The most relevant and purposeful information is that which has an impact on student learning. This kind of information goes beyond historical data and facts, exploring the individual student's experience and relationship within education.

## Distinguish between Difference and Disability

Individual student differences require analysis to determine if they are related to a disabil-

ity or related to other elements of a student's life. Federal regulations demand that educators recognize the effect or impact on learning of a student's individual background and experience when they assess for a learning disability. Assessments often occur, however, that do not appropriately interpret this personal information. By attributing a student's lack of success to a learning disability rather than to learning differences, educators overlook the opportunity to conduct an assessment that leads to appropriate accommodation for individual differences.

The "environmental, cultural, or economic disadvantages" to which the Code of Federal Regulations (34 CFR 300.541(b)(4)) refers are strictly prohibited as *indicators* of LD. Instead, according to the federal requirements, a student's environmental, cultural, and economic background are elements of the student as a whole.

University of Texas researchers Shernaz B. Garcia and Alba A. Ortiz refer to these elements as "other learning needs" and "other achievement difficulties." (Garcia and Ortiz, 1988) These are aspects of a student's life that have an impact on their learning, but should not be considered learning disabilities.

"Other achievement difficulties" refers to medical aspects, such as TBI; socioeconomic aspects, such as attendance at a variety of schools; or experiential aspects, such as a lack of appropriate prior instruction. "Other learning needs" refers to cultural aspects of the student, for instance, actions that depart from "traditional" school behavior. A common example of this is the reticence of a student to practice a skill publicly because he or she is from a culture that views failure as shameful. "Other learning needs" also refers to linguistic aspects, such as the need for a student to learn a skill in his or her primary language before learning it in English. Other aspects of a student's individual learning difference also require assessment. An example of the physical aspect is gender, which may be significant in the area of mathematics where girls may believe themselves less capable of success than do boys. A final element is the attitudinal aspect in which the attitude of the child toward him- or herself affects learning. For instance, abused, neglected, or homeless children often manifest low self-esteem, low expectations, and a disbelief in the possibility of personal success. (Berkan and Kadushin, 1993)

Not only do federal regulations require that educators recognize individual differences as a form of diversity, rather than as a disability, but good educational programming depends on this recognition. The teacher who can distinguish learning disabilities from individual learning differences is a professional who will increase any student's likelihood for success. The capability to recognize and distinguish this critical difference, however, is not innate. Learning to do this means moving from the judgmental perspective that the student alone brings problems to the learning environment, to the holistic perspective of the teaching and learning process. Like their students, teachers also bring cultural, environmental, and economic attitudes and experiences to the learning environment. The expectations within a specific curriculum and the limitations of certain traditional teaching methods further influence the learning environment.

Staff development activities, including individual professional development, allow teachers to do research or self-study on the subjects related to student diversity. An excellent first step is appendix E, "Preventing Inappropriate Referrals of Language Minority Students to Special Education," which offers Garcia and Ortiz's article in its entirety.

## *Collect Needed Information*

Evaluators should consider the following actions and resources for gathering needed information.

- Observe the student in relation to his or her environment.
- Interview parents, teachers, the student, and any significant others.
- Conduct formal and informal testing.

Educators recognize that several basic assessment models exist, but teachers should merge or blend components of each to create the most appropriate tool for an individual student or situation.

## **Observations**

Observation in a general education environment of a student suspected to have learning disabilities is a requirement in both federal and state regulations. It is also essential for the interpretation and application of test results to the student's level of successful learning. It is a

legal requirement that an evaluator(s) qualified to assess for suspected learning disabilities must conduct the observation. This evaluator must then submit a summary of information gathered from the observation in her or his individual report to the assessment team.

Evaluators should plan all observations and choose an environment for the observation that will provide relevant information. For example, preschool observation should occur in the child's home, daycare facility, or preschool and include the child's family members and personal toys. When preparing for any observation, educators should

- determine the focus of the observation;
- schedule the observation;
- contact the teacher for relevant classroom information, such as seating charts, identification of peers in the classroom who affect the student's behavior, lesson plans and activities, teacher concerns regarding the student, the assignment, and the presence of an observer; and
- plan to observe the student in more than one environment.

Figure 12, "Sample Observation Appointment Sheet," covers the basic information an observer needs to collect before coming into contact with the student. Observers may find this one-page form helpful when coordinating their plans with classroom teachers.

An observation may be systematic or nonsystematic. When it is systematic, the evaluator determines one or more behaviors to observe and the appropriate system to record those be-

haviors. An advantage of systematic observation is that it seeks specific and needed information. A disadvantage is that it may prevent the recording of other unanticipated, but relevant, behaviors.

Nonsystematic observation allows the evaluator to simply observe the student in the given environment and record incidents that may be pertinent to the evaluation. A disadvantage of nonsystematic observation is that an evaluator may not recognize relevant behaviors without the systematic structure. Anecdotal records are the usual result of the nonsystematic approach.

An observation often will lead to the discovery of the following types of information, and this knowledge will assist in planning for learning:

- Frequency of behaviors
- Duration of behaviors
- Extent of the difference between the observed student's behaviors and those of peers
- Match/Mismatch between student and curriculum
- Match/Mismatch between student and teaching methods
- Match/Mismatch between student expectations and teacher expectations
- Interactions between student and teacher
- Interactions between students
- Antecedents and consequences of student behaviors
- Specific academic skill differences
- Specific social skill differences

## Sample Observation Appointment Sheet

Student Name	Chronological Age	Date <i>Mo/D/Yr</i>
School	Grade	
Person Completing Report	Position	

To:

From:

I need to observe \_\_\_\_\_ in your classroom because he/she has been referred for evaluation. Please let me know if this time is inconvenient.

Tentative date and time of observation: \_\_\_\_\_

Room location: \_\_\_\_\_  
(Please notify change in time or location.)

In order to take comparative behavioral data, it would be helpful if you could indicate on this sheet by seat location, description, and so on, the following students in your class. (Please consider students of the same sex and similar socioeconomic background. Use no names, please.)

A "high achieving" student (academic/behavioral) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

An "average" student \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

A "low achieving" student \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Also—Please note general guidelines for behavior you expect in this class (handraising, in-seat, quiet talking ok, etc.)

Thanks for your assistance.

## Interviews

Significant information and insight may be obtained by speaking with the student, parents, and teachers. The interviewer should be non-judgmental and avoid aggressive questioning. Figure 13, "Effective Parent-Teacher Relationships," presents helpful information about working as partners with parents, and it is also relevant for interacting with teachers and students. The author of this article, Harold Schmidt, also co-authored a helpful communication resource, *Strategies: Effective Practices for Teaching All Children*, with DPI consultant Anne Rodgers-Rhyme. See appendix A for more information about that publication.

### *Parent Interviews*

As students' first teachers, parents can provide assessment team members with valuable information. The interviewer must recognize that parents' skills, time, resources, and communication styles vary greatly. Yet all parents have insights regarding their children that go beyond the knowledge of the schools. It is critical that interviews occur with appropriate sensitivity toward the common parental tendency to feel intimidated by educators and their professional terminology. When interviewing parents, the adage "walk a mile in the other person's shoes" should apply. If the interviewer allows parents adequate time to feel comfortable with the interview setting, the whole process will reap the benefits of strong communication: namely, clear perceptions and understandings of the child, knowledge of his or her strengths and difficulties with learning, and other information critical to the team's evaluation. Good parent interviews encourage parental participation. Figure 14, "Sample Parent Interview," provides interviewers with a structure and sample questions to use with parents.

### *Teacher Interviews*

Many of the issues involved in parent interviews also apply to teacher interviews. For instance, when conducting an interview with a

teacher, evaluators must request a mutually agreeable time and a confidential setting, as they do with parents. Yet, teacher interviews may further clarify academic issues and provide the opportunity for follow-up questions about cumulative records or the referral. They also may identify learning problems as perceived by the classroom teacher. Teacher interviews that follow an observation may clarify the information obtained in that specific setting. When identifying learning problems, it is helpful for teachers to be as specific as possible. Therefore, figure 15, "Checklist of Learning Problems," offers highly specific examples. Obviously, it should not be used as the only guideline for potential problems. Figure 16, "Regular Teacher M-Team Report," is a sample form that contains the questions most regular education teachers will need to answer about a student suspected of having LD. The format of the guidelines is a simple checklist and fill-in-the-blank structure. Evaluators and teachers should find it, or any necessary adaptation of it, helpful in the assessment process.

### *Student Interviews*

Observations and testing information provide an outline of the student as a learner. Interviewing the student completes that picture. Interviews may be formally or informally incorporated into the assessment process by using a questionnaire as a discrete information activity or by obtaining the information via interspersed questions across test sessions. Interviewing is especially effective when students share with adults information about their interests, goals, learning styles, strategies, attitudes, and applications. Figure 17, "Student Interview," is a structured set of questions that teachers may adapt for use with students of various age levels. Without adaptation, it is appropriate for secondary level students. Appendix G, "Sample Learning Style and Strategies Questionnaire," is a lengthier series of questions for students to answer directly on paper. Both should prove helpful to evaluators assessing students with various learning styles.

## Effective Parent-Teacher Relationships

By former DPI consultant Harold S. Schmidt

Teaching is easier and more productive when we take steps to establish parent-teacher partnerships. Such partnerships recognize the advantage of providing a unified home and school effort to enhance learning. The partnership concept implies equal status and the need for frequent communication. Partners recognize each other as equals and understand the importance of keeping each other informed.

Teachers bring their expertise on diagnosis, behavior management, curriculum and instruction, as well as their general knowledge of education and child development to the partnership. Parents contribute their knowledge of their child, the child's environment, their ability to exercise control over the child's behavior/activities inside and outside of school, and their influence on the child's attitude toward school.

Partnerships begin when the teacher assumes and acts on the assumption that all parents are competent and interested in doing what is best for their child. The majority will respond positively to this assumption if the teacher keeps them informed, involves them in planning and problem solving, and makes a real effort to understand and deal with the parents' feelings. EEN students often put additional stress on families. This stress is then translated into fear and/or anger that can interfere with communication if teachers are not prepared to deal with it. Effective teachers develop a sense of empathy for parents' feelings which allows teachers to interact positively with the parents even when the expression of the feelings might otherwise disrupt positive communications.

Good communications are paramount. Teachers should contact parents at the beginning of the school year, preferably before the student has gotten him/herself into trouble. The parents' first contact then is with an effective educator concerned and knowledgeable about their child, not an upset teacher who tells them how bad or incompetent their child is. The positive, proactive approach establishes an atmosphere that promotes better parent participation in planning and problem solving.

In these initial contacts the teacher should inform the parents of the classroom management plan, expectations, goals, and general instructional strategies. Parents need to know what is expected of their child so they can monitor the behavior. They need to know how and when they can contact the teacher when they have information they need to share or questions to ask. Regular communications via phone calls, notes, newsletters, and conferences give parents the information they need and the opportunity to positively impact on their child's educational experience. Teachers need to identify a method of communication they are comfortable with and can continue over time. Cumbersome communication programs are difficult to maintain and result in parents growing to doubt the teacher's interest/sincerity as the communications become less frequent.

Parent cooperation should be solicited with the first communication. Teachers need to let parents know how they can be involved with their child's school work both at home and at school. Parents need to know that the teacher considers their input as valuable and necessary. They need to feel welcome to visit the classroom and understand the guidelines for classroom visits.

Teachers should be as positive as possible in their communications with parents. The parents of EEN children have been conditioned to expect bad news. All teacher communications will have greater credibility and a more positive response when parents feel that the teacher has a balanced view of their child.

Parent-teacher meetings regarding IEPs, M-team reports, and disciplinary matters can be very anxiety-provoking for all concerned. Both parents and teachers should view these meetings as opportunities to improve the child's educational experience and welcome them. Here are some tips for hosting productive meetings with parent partners:

---

## Effective Parent-Teacher Relationships

1. Provide adequate notice about the time and purpose of the meeting and try to adjust to parent schedules.
2. Treat the parents as guests.
3. Limit interruptions and distractions.
4. Speak with the parents, not to them, and present your information as clearly (without jargon) and concisely as possible.
5. Give parents an opportunity to voice their concerns, feelings, ideas, and questions.
6. Listen carefully.
7. Be culturally sensitive.
8. Remember that it is possible to disagree and still treat each other well.
9. Advise parents who are uncomfortable about meeting alone of their right to bring an advocate.
10. Do not make statements to parents that you would not make in the presence of your peers.

Positive partnerships between parents and teachers are needed more than ever. Teachers must take the initiative to promote parent-teacher partnerships so that students can benefit from the more powerful educational environment created at home and school.

## Sample Parent Interview

Student Name	Chronological Age	Date <i>Mo/D/Yr</i>
School	Grade	
Person Completing Report	Position	

Tell me three things that you think your child is good at doing.

What do you like best about your child?

What things have you discovered at home that make your child:

- listen?
- read?
- do homework?
- follow directions?

Can your child follow written directions?

Can your child follow oral directions?

Does your child leave clear and understandable written messages?

What do you see as your child's problem areas

- at school?
- at home?
- in the neighborhood?

Which of the problems just mentioned should be handled at school, in your opinion?

Which could be addressed better at home?

What help are you able to give?

What do you expect of the school?

What kinds of contact make you most comfortable? (phone, letter, conference)

Do you want the teacher(s) to call you? How often?

Do you want or need regular (weekly/daily) phone contacts or written notes?

Do you prefer conferences?

What kind of responsibilities and environment exists in the home?

- study/quiet time and place?
- home responsibilities (chores)?
- curfews and rules?

Do you or any of your other children display any learning difficulties?

Who are some of your child's friends?

What qualities do you like about these friends?

What does your child do in his or her spare time?

Does your child have knowledge of money and use it correctly?

Does your child have a job?

What would you like to see your child do after graduating from high school?

Figure 15

## Checklist of Learning Problems

Student Name	Chronological Age	Date Mo/D/Yr
School	Grade	
Person Completing Report	Position	

**Statement of Problems** (A short statement to be completed by referral source)

Check those statements which best describe this student

### Academic Learning

- is slow to grasp new concepts
- has a short attention span, distractible
- is disorganized
- writes letters and numbers poorly
- daydreams often
- has difficulty understanding directions
- displays many inconsistencies in work
- is absent frequently
- has difficulty with time orientation
- has difficulty completing assignments
- seems *not* to work up to his/her ability
- has difficulty with written language

### Health

- has vision or hearing problems (circle)
- acts sleepy and tired
- complains of many physical ailments
- is poor in muscular strength
- is poor in muscular control and balance
- other health problems.

List:

### Social/Behavioral

- seems unhappy or depressed
- prefers to be alone
- seems to act out for attention
- appears lacking in self-confidence
- argues often
- appears over-anxious and nervous
- appears inappropriately fearful
- sulks to get his or her own way
- has trouble controlling temper
- has physical fights with others
- has trouble making friends
- has a dislike for school
- is sensitive to criticism
- has difficulty accepting direction and redirection

### Communication

- is hard to understand (articulation)
- has difficulty with verbal expression
- has poor vocabulary
- uses immature sentence structure

## Checklist of Learning Problems

### Academic Skills

Estimate performance level for each subject and check problem areas as observed

Reading Level \_\_\_\_\_  
Performance Level

- loses place, repeats words
- does not read fluently
- confuses similar words or letters
- applies phonics poorly
- is poor in comprehension

Spelling Level \_\_\_\_\_  
Performance Level

- orders letters in words incorrectly
- has poor memory
- has poor application

Math Level \_\_\_\_\_  
Performance Level

- has trouble remembering facts
- has difficulty with story problems
- has poor computation skills
- has problem with concepts

Writing \_\_\_\_\_  
Performance Level

- reverses letters
- has poor spacing
- has difficulty expressing ideas
- has poor penmanship
- has poor punctuation

### Areas of Strength

In your opinion, what are the specific educational needs of this student?

Other comments:

Signature \_\_\_\_\_

Figure 16

## Regular Teacher M-Team Report

Student Name	Chronological Age	Date Mo/D/Yr
School	Grade	
Person Completing Report	Position	

Please complete the following as accurately as possible. This report will be used for purposes of documenting the extent to which the student is capable of functioning in regular education classes and to assist the M-team in determining what supportive help, modification, or alternative classes may be necessary to meet the student's individual needs.

### Academic

Y N

What is the present letter grade the student is receiving in your class? \_\_\_\_\_

Is this grade consistent with previous grades? .....  Y  N

Is this student graded on the same basis as the entire class? .....  Y  N

Does the student hand in assignments on a regular basis? .....  Y  N

If yes, are assignments complete? .....  Y  N

If yes, are assignments accurate? .....  Y  N

Do you suspect the student has any problems in basic skill subjects (for example, reading, math, spelling)? .....  Y  N

Do you notice a difference between the student's oral work and written work? .....  Y  N

If yes, describe:

What level (grade) materials are you using with this student? .....

What letter grade(s) are earned on assignments? .....

What letter grade(s) are earned on teacher/unit tests? .....

If the student is failing or performing significantly below average, what kind of help, support, or change might be necessary to improve performance?

### Behavior

Y N

Is the student able to stay on task in your class? .....  Y  N

Is the student able to stay on task in a small group or one-on-one? .....  Y  N

Does the student ask for help when needed? .....  Y  N

Is the student disruptive in class? .....  Y  N

If yes, describe:

**Regular Teacher M-Team Report**

**Social Adjustment** Y N  
 Does the student interact appropriately with peers? .....    
 If no, describe:

Does the student interact appropriately with adults? .....    
 If no, describe:

**Communication Skills** Y N  
 Does the student appear to have any difficulty communicating? .....    
 Describe:

**Physical** Y N  
 In your opinion, is there any reason to suspect hearing or vision problems? .....    
 If yes, describe:

Are you concerned with any other possible health problems (for example, nutrition, general alertness, drowsiness, headaches, colds)? .....    
 If yes, describe:

Do there appear to be any obvious coordination problems? .....    
 To your knowledge, is the student taking any medication? .....

**Attendance** Y N  
 Is the student frequently absent or tardy from class? .....

---

## Regular Teacher M-Team Report

	Y	N
<b>Remediation Methods</b>		
Review cumulative records .....	<input type="checkbox"/>	<input type="checkbox"/>
Conference with student .....	<input type="checkbox"/>	<input type="checkbox"/>
Parent conference .....	<input type="checkbox"/>	<input type="checkbox"/>
Modified assignments/methods (example: daily assignment sheets) .....	<input type="checkbox"/>	<input type="checkbox"/>
Modified behavioral teachings .....	<input type="checkbox"/>	<input type="checkbox"/>
Referral to counselor .....	<input type="checkbox"/>	<input type="checkbox"/>
Referral to principal .....	<input type="checkbox"/>	<input type="checkbox"/>
Referral to LFC, instructional aide, reading specialist .....	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____ .....	<input type="checkbox"/>	<input type="checkbox"/>
Please describe results of remediation efforts:		

### Student's Strengths

### Recommendations

---

Signature

---

Date

## Student Interview

Student Name	Chronological Age	Date <i>Mo/D/Yr</i>
School	Grade	
Person Completing Report	Position	

Do you know why I am seeing you?

Do you think you are doing as well as you could in school?

Why?

What are your easiest subjects?

Why? (class, teacher, text, and so forth)

What are your hardest subjects?

Why?

How well do you speak in front of your class when

- answering questions?
- giving a speech?

How well do you understand what is being said in class?

How well do you take notes?

How good of a reader are you?

Do you wear glasses?

How well do you remember what you

- read?
- see?
- hear?

Describe your writing, penmanship, and spelling.

How easy is it for you to write your ideas on paper?

How do you think you do in math

- calculations?
- word problems?
- memorizing facts?
- using money, making change?

Name in order the

- seasons
- months
- days of the week

Do you like art or art projects?

## **Student Interview**

Do you speak or take any foreign languages?

What kind of mechanical skills do you have?

Do you like music? Do you play any musical instruments or sing?

Who are your favorite musicians or groups?

Do you like sports? Do you play any sports?

Which ones?

What do you like to do in your free time?

Do you watch any TV?

What are your favorite shows?

Why?

Who is your closest friend?

What characteristics do you like about him or her?

Do you have any job experiences like babysitting or mowing lawns?

Are there any job seeking/working skills that you believe you need to develop before leaving high school, such as filling out applications, interviewing, or making phone contacts for jobs?

At this point what do you plan and hope to do beyond high school?

Do you hope or plan to attend college, trade school, or vocational school after high school?

What is the biggest problem in the world?

## Test Selection

Careful selection of tests is essential in evaluations that may result in the identification of a learning disability. It is also essential for the diagnosis of specific needs. Test selection should begin with analysis of the knowledge and skills that need to be evaluated. Evaluators should recognize whether the selected tests adequately measure the specific knowledge or skills.

Evaluators should select tests that provide information not currently available from other sources. They should also consider the amount of time required to administer, score, and interpret the test, as well as the cost of purchasing and using it.

The test's specific content should correlate to the curriculum to which the student has been exposed. The student's age, ethnicity, and socioeconomic status are part of this correlation.

## Technical Adequacy

The selection and use of tests in the assessment process is critical. Used properly, tests will provide important diagnostic information, but poor selection and improper application of the tests will lead to confusion, or worse, inappropriate diagnosis. A major consideration in selecting a test must be its technical adequacy. An evaluator can determine whether a test is adequate if it is standardized, reliable, and valid. Figure 18, "A Checklist for a Test's Technical Accuracy," establishes the criteria of a technically accurate test, which includes three basic elements:

standardization—standard, or normed, samples;  
reliability—statistical consistency; and  
validity—proven and appropriate measurements.

The evaluator is responsible for carefully selecting tests that are appropriate in two basic ways: in their purpose, and in the student's individuality. Purpose relates to the type of assessment taking place, whether it is for a learning disability in a specific area; an overall, or holistic evaluation; or a transition from one program to another. The student's individuality refers to her or his age, ethnic and cultural differences, special learning circumstances, and other specific traits or needs. The technical

Figure 18

### A Checklist for a Test's Technical Accuracy

#### Standardization

- The normative sample is representative of
- the population of which this student is a member.
  - a large enough sector of the entire population (at least 100 per grade level) to be a dependable predictor.
  - a relevant population in relationship to the purpose of the test.

#### Reliability

- The test data is stable over time.
- The test-retest reliability is close (0.90) to perfect reliability (1.00).
- The internal consistency (the use of slightly different test items that result in the same student score) occurs if the test is sound.
- The internal consistency occurs if the interrater reliability, or percentage of agreement, between test scores is high.

#### Validity

- The content of the test items appropriately and accurately measures what the authors claim. (content validity)
- The test score accurately correlates with current criterion measures for the student. (criterion-related validity)
- The test score accurately predicts how the student will perform on a criterion measure at a later date. (construct validity)
- The test has successfully proven to be a measure of a specific domain or construct.

#### Overall

- The test is
- well-standardized.
  - reliable.
  - valid.

adequacy of tests is determined by careful reading of the test manual. Responsibility is on the educator to "do the homework," that is study the manual and determine the test's technical adequacy. Determining this is not simply deciding whether a test is good or bad. Technical adequacy refers to a test's appropriateness for a specific individual. Many quality tests exist, but inappropriate application of any test, even one of superior construction, compromises its adequacy.

## *Analyze and Synthesize Information*

Analysis and synthesis of collected information begins with a summary of the findings of the assessment. Summaries should be concise, yet comprehensive. Good summaries group the information in such a way that evaluators can consider each piece appropriately in light of all the other information. Team members then compare this information to an established point of reference. The point of reference should be norm- and/or criterion-based with consideration for the age, grade, behavioral, cultural, and environmental expectations of the population on whom the test was normed. Comparison of the collected information determines a student's academic and behavioral strengths and weaknesses.

After identifying a student's strengths and weaknesses, educators must account for and analyze significant discrepancies in the student's performance. Discrepancies between the individual's performance and the point of reference, and discrepancies within the individual's performance require explanation. If individuals participating in the assessment team process find discrepant information, the team members must provide an explanation for it.

During synthesis, all the information comes together. Evaluators should describe patterns of performance rather than single areas of discrepancy. The goal of synthesis is to comprehensively describe the student as a learner in relationship to his or her individual environment. Relationships between learning and environment require discussion. The mutual and reciprocal effects of the learner on his or her environment and the effects of the environment on the learner are also necessary.

## **Data Selection**

Only data that is likely to provide useful information about programming needs and identification should be selected for analysis and synthesis. Useful information often includes a student's achievement levels, learning potential, processing abilities, learning discrepancies, classroom performance, peer and adult interactions, behavior, social or emotional adjustment, learning style, and background information. These factors have significant implications for diagnosis or learning and should serve to

- determine student's levels of skills and knowledge.
- determine areas of strength for the student.
- determine areas of weakness for the student.
- compare student's functioning to the life goals established by the student and his or her family.
- compare student's functioning to that of age or grade peers.
- compare the student's functioning to the reasons for the referral for evaluation.
- determine indicators of a psychological processing deficit. ("In child" deficit is the Wisconsin term for this.)

Irrelevant features (sibling comparisons, speculations about family history, elaboration of test validity and reliability, irrelevant background information, and speculation about cause) distort and complicate the analysis. Teachers should know not to bring forward this kind of information but must be aware that parents might consider it relevant. Educators must take care not to alienate parents who relay this kind of information. Good communication requires that teachers and parents share the responsibility for knowing what kind of information is helpful, and teachers have the opportunity to help parents distinguish relevant features from irrelevant ones.

## **Error Analysis**

Error analysis describes and categorizes the incorrect responses of the student. It is a detailed analysis of student response beyond the "correct" or "incorrect" categorization. Its aim is to discover systematic error patterns based on an adequate number of samples.

Error analysis is a crucial component of any evaluation process. It is important for the evaluator to note the type of errors the student is making. Figure 19, "Error Analysis," presents nine types of errors that students may exhibit. It presents the relationship among specific errors, a general area of weakness, and a category of deficit. Categories of deficit include psychological processing, language, behavioral, emotional factors, and academic.

Error categories that are too vague and general—arithmetic problems dealing with numerals 0-999—are not useful. Error analysis is most meaningful when it is combined with diagnostic interviews. When students explain the

procedures that they apply to their work and the reasoning behind them, educators can make the best assessment of students' needs.

A detailed error analysis can be of great value for instructional planning. It provides the teachers with valuable information regarding

- prerequisite skills that are missing or mislearned,
- strengths and weaknesses,
- production abilities (writing, oral, or motor responses),
- preferred learning environment, and
- learning style.

Figure 19

### Error Analysis

Error/Task	Weakness	Deficit Category
limited, short-term recall of main idea or facts	poor memory	psychological processing
slow, non-fluent reading rate	poor comprehension	academic
gives up too easily on task	inability to deal with frustration	emotional
incorrect application of multiplication procedure	poor computation skills	academic
inability to focus on relevant information	passive, withdrawn behavior	behavioral
limited knowledge of phonics	poor decoding skills	academic
money skills inadequately applied to decimals	poor association skills	psychological processing
handwriting is labored and interferes with thought process	poor written language	academic
misunderstanding content of reading lesson	poor comprehension	language

### Apply New Information

The goal in planning for student learning is to initiate changes within the student's environment and educational program in order to increase overall learning. The assessment team is not necessarily the same team that designs the new educational plan. In Wisconsin, the

M-team's responsibility concludes with the determination of the student's eligibility and need for special education. A group of parents, educators, and the student then begin to design the individualized educational plan, or IEP. If the group that designs the educational plan is different than the assessment team, they have a responsibility to be familiar with all of the infor-

mation and procedures of the assessment team, because the initial assessment provides a base for the educational plan. Figure 20, "The Wisconsin Referral Process," is a flow chart that shows the sequence and time frame of assessment in Wisconsin. Detailed legislation and interpretations for Wisconsin educators appear in appendixes B-D.

The decisions that the group makes in regard to these changes should be logical extensions of the analysis and synthesis of the collected information. As a group, they can then develop the educational plan and implement the learning activities that will meet the student's educational needs. These decisions about learning involve changes in the student's home, school, community, and self that will improve learning.

The group needs to base its decisions on accurate interpretation of data that is pertinent to identification and programming, such as achievement levels, behavior, processing, learning style, learning potential, and background information. They should interpret data on the basis of observed facts rather than on personal opinion or theoretical premises. They should also avoid emphasizing trivial information like raw scores, or technical data, such as basal or ceiling numbers. Decision-making statements should be clear and based on a sound understanding of the student's abilities, difficulties, and needs. They may include statements about the following:

- the student as a learner,
- learning needs,
- behavioral needs,
- interventions,
- accommodations, and
- findings as they relate to the state eligibility criteria.

Evaluators must take care to refrain from making statements that are

- not based on data obtained through the evaluation process,
- elusive to the evaluator's area of expertise (such as, decisions about medical or psychiatric needs),

- have no relevance to identification or learning needs, and
- draw conclusions regarding identification of a disability.

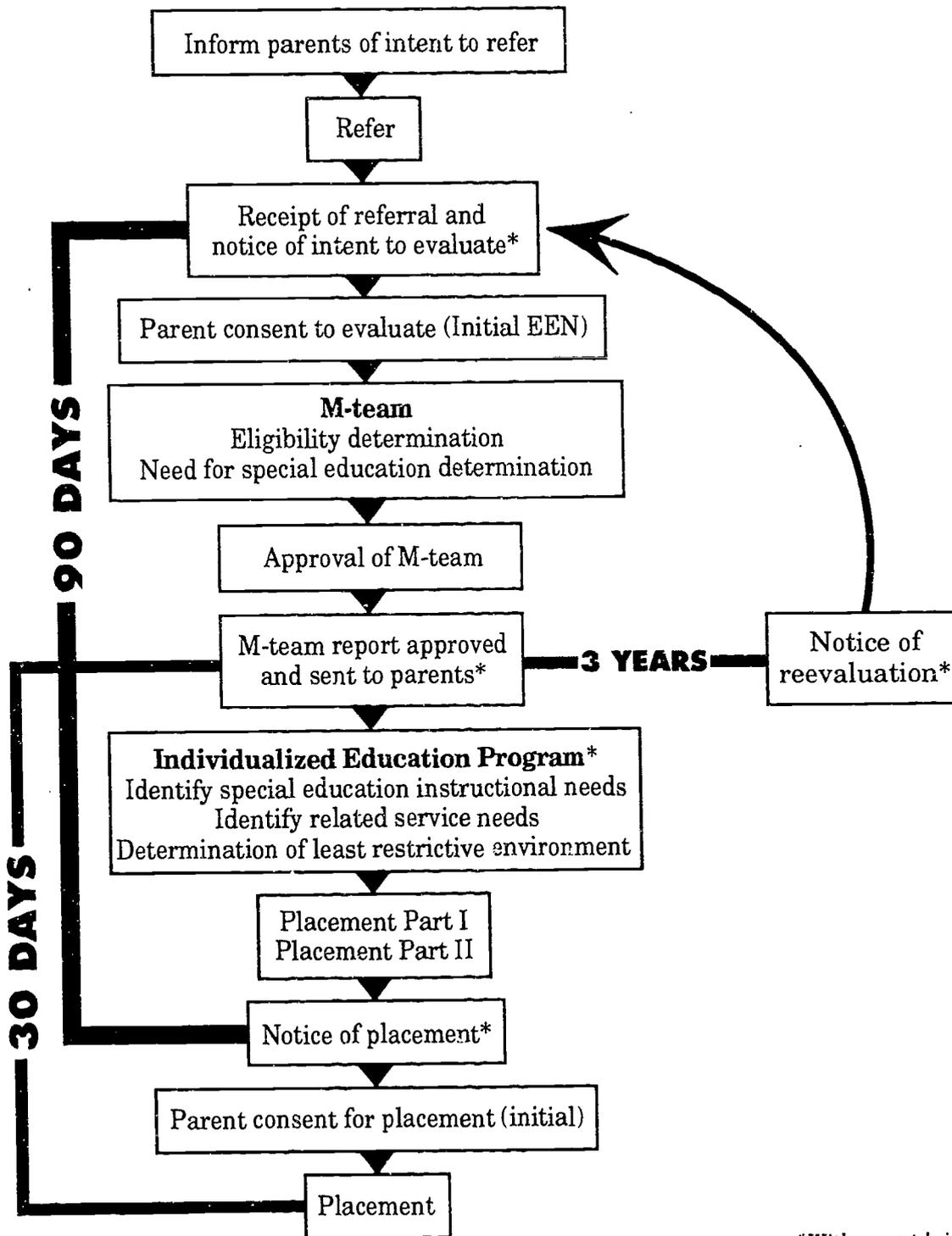
The group should present all evaluation data and information in an organized manner. Report guidelines for learning disabilities provide a logical outline for consolidating information in the assessment process. The guidelines help to organize information and ensure that all components of assessment are addressed. Figure 21, "Sample Learning Disabilities Report Checklist," contains guidelines for report writing and has been included for reference. Any other formats should include the relevant features of figure 21 and lend themselves to a clear and comprehensive style of writing.

## The IEP in Wisconsin

For formal assessments in the identification of learning disabilities in Wisconsin, every step of the evaluation process requires that the evaluator compares and contrasts collected information to Wisconsin's state learning disabilities criteria. Upon completion of his or her report, the learning disabilities evaluator should have an opinion, based on the information collected, as to whether the child meets the state criteria for LD. That opinion should not be part of the individual report. Evidence supporting that opinion may, however, be appropriate. For example, the LD teacher's report should address evidence of psychological processing deficit and any exclusionary factors that may be relevant to decision making. The actual decision that the child has a learning disability belongs to the assessment team, and they base that decision upon review of each team member's report and the consequent group discussion of team participants.

An integral part of the evaluation involves developing an educational plan that addresses learning problems. The plan should have practical implications for classroom instruction and be written in a clear, concise manner that is easily understood by parents, teachers, and other school personnel.

### The Wisconsin Referral Process



\*With parents' rights

## Sample Learning Disabilities Report Checklist

Student Name	Chronological Age	Date <i>Mo/D/Yr</i>
School	Grade	
Person Completing Report	Position	

### Reason for referral

Person making the referral:

Specific reason(s) for the referral:

### Background information

#### *School history*

- Check the student's cumulative file
- Note school(s) attended prior to this evaluation
- Any EEN reports/placements
- Report cards
- Absences
- Test results

#### *Attendance records*

- Check attendance for the school year
- Any letters sent home for excessive absences

#### *Relevant information about previous interventions*

#### *Medical*

- Vision correction
- Hearing correction
- Use of medications

#### *Family/community*

- Family relationships
- Community involvement
- Police records
- Involvement with social services

## Sample Learning Disabilities Report Checklist

### Interviews

- Parents
- Teachers
- Student
- Others

### Observations

- Classroom
- During testing situations
- Other settings (playground, lunchroom, halls)

### Current levels of performance

#### *Oral language*

- Functional (observation, interview)
- Formal tests
- Informal tests

#### *Reading*

- Functional (observation, interview)
- Formal tests
- Informal tests

#### *Written language*

- Functional (observation, interview)
- Formal tests
- Informal tests

#### *Spelling*

- Functional (observation, interview)
- Formal tests
- Informal tests

#### *Mathematics*

- Functional (observation, interview)
- Formal tests
- Informal tests

#### *Processing skills*

- Functional (observation, interview)
- Formal tests
- Informal tests

#### *Other evaluation data*

- Social skills
- Study skills
- Self esteem
- Behavior
- Vocational
- Learning styles

### Analysis, interpretation, and synthesis of data

Information from above data is used to:

- Determine areas of strength
- Determine areas of weakness
- Describe the student's learning style
- Compare the student's functioning to peers/age mates
- Compare the student's functioning to the reason for referral
- Determine indicators of an "in-child" deficit

### Summary of information and recommendations for appropriate action

- Develop a description of the student as a learner (summary of findings)
- Discuss how your findings and other available data relate to the state eligibility criteria
- Give instructional and behavioral needs along with recommended interventions

## *Developing the IEP*

The IEP requirement has two main parts: there is the IEP meeting, where parents and school personnel jointly make decisions about an educational program for a child with a disability; and there is the IEP document, a written record of the decisions reached at the meeting. (See appendix F, Part 300 of the Code of Federal Regulations.)

Appendix D identifies the six functions or purposes of the IEP. These functions or purposes establish an expected level of performance for the *process* (preparing for and holding the IEP meeting), and for the *product* (the IEP document). Each time the IEP requirement is being met, parents and educators should assess the quality of their efforts. The following guidelines may be helpful.

Each IEP *meeting* should score highly in playing the following roles:

- a communication vehicle between parents and school personnel,
- an opportunity to resolve differences concerning student needs, and
- a commitment of the agency's resources to meet the individual needs of the student with a disability.

Each IEP *document* should score highly in playing the following roles:

- a management tool of the special education and related services appropriate to the student's special learning needs,
- a compliance and monitoring document used by state and federal governments to determine if a student is receiving FAPE as agreed by parents and school, and
- an evaluation device to determine the extent of progress toward the projected annual goals. In preparation for the IEP meeting, each participant should come with information to share.

This may include current data about the student's present level of performance, a list of the student's education-related needs, the services that may possibly meet those needs, and the desired outcomes of those services. A table such as the one in figure 22, "Sample Worksheet Completed by Any IEP Team Member," could be constructed. Educators may find the continuum-based worksheets for developing the process and product of the IEP, figures 23 and 24, helpful as well.

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## Sample Worksheet Completed by Any IEP Team Member

<b>Areas of need and interest, including present level of performance.</b>	<b>What services may be able to meet this need, including modifications and accommodations in regular education?</b>	<b>What is the anticipated outcome?</b>
Reading decoding Texts: second grade level Sports: fourth grade level	Requires reading accommodation in all classes—highlight texts as pre-study strategy. Requires one on one or small group phonics instruction and daily oral reading to build fluency.	Establish and use strategy to anticipate content of classroom learning/activity. Increase reading decoding by two grade levels.
Reading comprehension Texts: second grade level Sports/sciences: third to fourth grade level	Requires instruction and guided practice in strategies for reading comprehension and memory.	Increase reading comprehension by two grade levels.
Spelling—second grade level	Modified expectations for all spelling requirements.	Spelling will improve as reading skill increases. Concentrate on spelling remediation when reading skill is fourth grade and better.
Attention to task Difficulty with lectures, discussions, paper/pencil tasks. Best with hands-on, active engagement, and known outcomes.	Limit seatwork (listening, worksheets, and so on) to ten minutes at a time. Increase amount of hands-on activities, labs, projects, organizing learning on large poster sheets, frequent short assignments.	Student must experience a variety of ways to add novelty, interest, motivation to all tasks as a model for how he or she can advocate for himself or herself.
Interests Sports Sciences Computers	Encourage participation in sports, science classes, and projects. Provide computer opportunities.	Develop interest areas as strengths for career/vocational exploration and as motivators to pursue life-long learning.

Figure 23

## Developing the IEP: The Process

### Process

The IEP is more of an instructional task than an administrative task, though both components exist within the process.

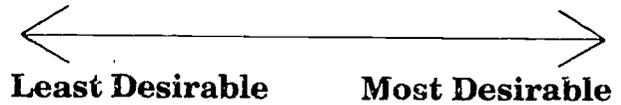
The IEP team is a student study team, not a contract writing team.

The IEP discussion focuses on the student's strengths, interests, and needs and relates each annual goal to a life-long learning need of the student. Its focus is not district policy, district curriculum, or services available.

Useful and appropriate information is used by the IEP team.

Every member of the IEP team, including the student and his or her parents, contribute to and share in the information and discussion at the IEP meeting.

The IEP team functions and makes decisions as a team.



**Least Desirable**

**Most Desirable**

Administrative task

Instructional task

Contract writing team

Student study team

Focus on district needs and demands

Focus on student interests and needs

Data is the same for all students

Data is unique to this student

Only one or two members contribute/share

All members contribute/share

Autocratic operation

Teamwork

**Developing the IEP: The Product**

**Product**

The IEP document describes the specially designed instruction and related services, if any, needed by the student rather than the services available in the district.

Each present level of performance (PLOP) and its annual goal (AG) clearly define where the student is and where the student is planned to be within a clearly defined domain (such as reading, reading comprehension, work completion, and others).

The short-term objectives (STOs) clearly define major benchmarks that progress from the present level of performance to the annual goal and establish a clear framework from which to develop instructional plans.

The evaluation components (criteria, procedure, and schedule) are written for each STO, are measurable (can be seen, counted, or heard), and match the nature of the specific objective.

The specific special education needed to meet each goal is defined in a manner that permits calculation of the amount of special education to be provided.

This IEP document provides a map and a progress check for the student that will be useful throughout the term of the IEP.



**Least Desirable**

**Most Desirable**

Focus on district services available

Focus on services the student needs

PLOP and AG are missing, unclear, or unrelated

PLOP and AG are clear and related

STOs are unclear or too specific

STOs define clear benchmarks from PLOP to AG

Arrows or dittos are used; not measurable; do not match STO

Evaluation components are individualized, measurable, and match STO

Too vague or makes a placement decision

Clear enough to calculate amount of special education

IEP is only good for filing away

IEP is useful as a map and progress check

# Establishing the Quality of Assessment

# 7

This chapter provides detailed analysis of assessment in content areas, learning processes, and transitions to postsecondary environments. It further clarifies the evaluator's responsibility to analyze and synthesize the data collected in the evaluation of a student. The creation of an individualized educational plan (IEP) and the provision of a free and appropriate public education (FAPE) depends on the adequacy of the data collected and the analysis of that information.

## *Assessment in the Content Areas*

For students with learning disabilities, basic skills and content area assessments are usually the first consideration. A successful evaluation is one in which evaluators adequately analyze all of the factors that influence the student's skill and knowledge within specific content areas, while they conscientiously synthesize all of the data collected. The result is a well-defined picture of the student's strengths and weaknesses.

## **Reading**

Many students will not become successful readers unless teachers, acting as evaluators, recognize what reading skills are essential, determine what skills the students lack, and facilitate the learning of needed skills. In addition to focusing on deficient skills, an evaluation must identify restrictive dependencies, curriculum mismatches, or other inhibiting factors. While

current federal regulations require districts to administer some type of standardized tests, with age or grade equivalents, percentiles, and standardized scores; these measures give only a general view of the child's reading levels. Informal data gathered from interviews, observations, criterion-referenced tests, and inventories (such as the Dolch sight word list, basal reader vocabulary list, alphabet recognition, and others) are needed to provide a comprehensive evaluation that is useful for instructional programming and identification. In addition, analysis of the child's current reading stage is essential. (To review Chall's reading stages, see figure 4 in chapter 3.)

Basic reading skills examined at the elementary level may include listening comprehension, letter recognition, correspondence of letter to sound, auditory skills, word recognition, word attack, oral and silent reading, and reading comprehension. In addition, the evaluator should recognize linguistic, cultural, gender, and socioeconomic differences that may affect the student's ability to learn to read.

At the intermediate and secondary level the evaluation process becomes more involved as the reading demands and expectations placed on the student become increasingly complex. At these levels, greater emphasis is on vocabulary, comprehension during silent reading, use of contextual clues, study skills, and the obtaining of content information from textbooks. If the student is not yet reading at Chall's Stage Four, "Multiple Viewpoints," educators must provide remediation and compensation simultaneously. Assessment for students at all

levels should address remediation, compensation, and enrichment needs to some extent.

The pertinent questions for evaluating remedial needs include the following queries:

- Does the student lack knowledge of phonemic analysis?
- Does she or he overly rely on word analysis?
- Does the student read for content or predetermine the content and resort to word calling?
- Does the student ignore content and simply word call?
- If the student knows phonics rules, can he or she apply them with successful blending?
- Has the student had sufficient experience in oral reading of a familiar language to permit the development of reading confidence, a necessary prerequisite to fluency?

The answers to these questions produce an analysis that is necessary for educators to determine the appropriate remediation. For example, a student who depends too frequently on word analysis reduces his or her reading rate and therefore his or her comprehension. Appropriate remediation would include paired reading because it encourages faster reading rate. Likewise, a student who predetermines content needs to have pictures and other visual cues removed from sight.

In addition to remediation, the student with LD must develop compensatory skills in order to successfully learn in general education classes. Therefore, the data obtained during the assessment also must reflect the academic demands placed on the student by the current curriculum. Evaluation may include vocabulary development, reading fluency, and oral and silent reading comprehension, both literal and inferential. It also must include analysis of known and unknown reading strategies, such as scanning for information. Valuable information may be obtained through a study skills survey or inventory, like the one in appendix G. The following questions may guide assessment for compensatory needs.

- Does the student have an experiential base for comprehending the content of the reading material?
- Has the student learned study skills that help to identify relevant information in the printed material?
- Has the student developed the cognitive skills of analysis and synthesis and can he or she apply them to information?

• Can the student read for multiple or complex purposes, or must the assignment be singular in purpose?

• Can teachers modify the student's procedures of acquiring information allowing the student to listen rather than read, read alternative materials, or read limited sections of the assignment?

• Can teachers modify their expectations of the student using an alternative curriculum, reduced curricular requirements, or other strategies?

Additional informal measurement of reading subskills in subjects other than reading may address enrichment needs. Evaluating reading skills within the various content areas is sound practice and lends itself to cooperative planning, which is necessary between the learning disabilities teacher and the content area teachers. The following questions may guide assessment of enrichment needs.

• Does the content of the lesson have value for life-long learning?

• Is it relevant to other activities in which a student is involved currently or in the future, such as an application for employment or for college?

• Are the student's interests taken into account while developing the curriculum?

• Do general education classes include a curriculum with modifications, if needed, that will address the interests of all students?

To fully understand the nature of the child's reading difficulties, each component of reading needs careful analysis and interpretation. Examining student performance on various subskills lends itself well to prescriptive teaching. The five fundamental subskills in reading are listening comprehension, phonemic awareness, decoding, fluency, and reading comprehension. Information obtained through such an analysis of these developmental skills provides insight into a student's processing deficits and strengths and provides the teacher with a means for effective remediation, compensation, and enrichment.

Figure 25, "Receptive/Expressive Language," is a useful tool for teachers who must deconstruct and explain the developmental skills of reading to students, parents, or others who may not be familiar with the professional language of the educational field.

Figure 25

## Receptive/Expressive Language

<b>Listening Comprehension</b>	(Understanding the spoken word)
<b>Phonemic Awareness</b>	
— letter recognition	(naming all the letters)
— letter sound	(naming/making the sound)
— auditory skills	(accurately hearing the sounds of the letters)
<b>Decoding</b>	
— word recognition	(saying words from memory)
— word attack	(pronouncing and blending the parts of words)
<b>Fluency</b>	(developing a smooth flow to both oral and silent reading, resulting in increased comprehension)
<b>Reading Comprehension</b>	(understanding content)

### *Listening Comprehension*

Information about a student's listening comprehension may have a significant impact on decisions regarding the way a student learns. The diagnostician can evaluate this area by reading passages provided in oral reading tests and then asking related comprehension questions. Informal measures may include using content material from various subjects. Because text books are written at various grade levels, the examiner needs to be aware of the approximate level of expectation of the specific text. Comprehension questions should be reflective of those frequently asked of students in that corresponding grade.

### *Phonemic Awareness*

In order to "break the code" of converting the abstract symbols of the alphabet to sounds, and then to meaningful words, students must learn the phonemes that are blended together to make words. Doing this requires adequate auditory skills and recognition of letters and of the sounds associated with them. Lack of phonological awareness significantly interferes with reading and other language skills. (Chall, 1991)

### *Decoding*

Several developmental stages compose the decoding component of learning to read. When

assessing a student's decoding skills, evaluators must take care to recognize the validity of the assessment in connection to the skill being assessed. For example, a student's ability to apply word attack skills may not be the same as his or her ability to read words in context. A student's ability to apply word attack skills may be more symptomatic of lack of phonics instruction than of a disability. Both informal measures and standardized tests should be used to identify the student's specific decoding problems.

### *Fluency*

Fluency in reading is essential for good comprehension. In oral reading, fluency is determined by assessing the number of correct words per minute that the student reads. After the student demonstrates adequate fluency in oral reading, evaluators should begin to assess fluency in silent reading. By calculating the number of words read silently per minute and evaluating the student's comprehension using selected questions, the evaluator will obtain a reasonable estimate of the student's fluency in silent reading. See figure 26, "Desired Reading Rates for Various Instructional Levels," (Carline and Silbert, 1979) for recommended oral reading rates.

Figure 26

### Desired Reading Rates for Various Instructional Levels

Instructional Level	Words per minute on first reading
Second third of grade 1 materials	45
Last third of grade 1 materials	60
First third of grade 2 materials	75
Second third of grade 2 materials	90
Last third of grade 2 materials	110
First half of grade 3 materials	120
Second half of grade 3 materials	135
Fourth grade and higher	150

#### *Reading Comprehension*

An in-depth analysis of a student's comprehension difficulties requires both formal and informal tests. The student reads a passage and responds orally to questions about vocabulary, the main idea, sequence, and literal and inferential comprehension. Students' errors could be due to

- lack of fluency.
- decoding deficits.
- lack of effort.
- lack of knowledge of critical vocabulary.
- inability to understand directions.
- lack of appropriate teaching strategy.
- lack of experiential knowledge or cultural background.

While assessing reading comprehension, a distinction needs to be made between literal comprehension, the student's understanding of factual information, and inferential comprehension, including critical thinking.

#### *Potential Problems in Reading Assessment*

**Curriculum Match.** Various standardized tests match better with some reading curricula than with others. Care should be taken to determine if the student is deficient in a specific skill area because he or she was unable to learn it or because it was not a part of the curriculum he or she was taught.

**Decision-making Match.** Some tests are not useful in making eligibility decisions. Others are not useful in making instructional decisions. Evaluators should compare material that the test actually assesses with the information desired and the decision to be made.

**Technical Adequacy of Tests.** Many tests are technically inadequate for the purpose at hand. The evaluator should know both the test and its adequacy rating in the current literature. (See figure 18 in chapter 6 for more information.)

**Generalized Predictions.** Determining strengths and weaknesses based on specific tests administered at a point in time with a specific number of test items is not sufficient to make general predictions about a student's overall reading skill. Evaluators should limit interpretations to the specific skills assessed, such as word attack skills, word comprehension skills, and others. For more information on language assessment, readers may want to read *Language Sample Analysis: The Wisconsin Guide* by Jon Miller and Barbara Leadholm (1992), which provides both narrative information and reference data on language, deficits, assessment, and technology.

A final note: Statistically, male students are more likely than female students to experience reading disabilities. These reading problems may be due to maturity level, genetics, motivation, or other causes inherent to the student.

Appendix A contains resources about learning disabilities that include gender studies.

## Written Language

Children who have difficulties with listening, speaking, and reading skills will likely have problems with the normal acquisition and use of written language. While the mechanical components of written language can be scored in a formalized manner (grade equivalents, percentiles, standard scores), the more abstract aspects will require a subjective judgment.

Primary level (K-3) areas to be assessed may include right-left orientation, tracing, copying, printing skills, basic punctuation and capitalization skills, usage, and writing simple sentences. For the primary-aged child, an informal writing sample will need to be obtained and analyzed. Evaluators should obtain a writing sample from another child in the same grade and class and consult with the teacher of that class.

At the intermediate and secondary level, evaluation should include measures of productivity (total number of words or sentences), content, and mechanics and craft. This third element includes spelling, punctuation, usage, capitalization, sentence structure, paragraph development, neatness, vocabulary, and handwriting.

In addition to obtaining a standardized measurement of the student's writing abilities for identification and group comparison, an informal assessment should be completed that also includes a writing sample from the student. The sample may include a story or event that is interesting and motivating to the student and a representative sample from daily assignments.

A writing sample, regardless of the student's age, is a powerful diagnostic tool because it examines the student's ability to integrate and apply basic skills to a written task that reflects curricular demands. It measures the higher stage of learning—application—that is required in most academic classes.

## Handwriting

A student's poor handwriting may be related to his or her fine motor skill, visual perception, pencil gripping, positioning or slanting of paper, or seating posture. It may also relate to the

difficulty level of the topic. Assessment of handwriting may be necessary to modify behavior that affects handwriting, like grip or seating. With the wide accessibility to word processors, this concern is less of an issue than in past years.

## *Potential Problems in Written Language Assessment*

**Curriculum Match.** Writing has only recently received emphasis in school curricula. Students who have had inadequate experience with this skill will not test well on standardized tests. In addition, many factors influence the production of writing, such as prior experiences, motivation, and type of writing activity.

**Predictive Validity.** Assessments in written language have demonstrated limited success in identifying the aspects of writing that significantly affect overall written language performance. Evaluators must apply their best skills of analysis and synthesis when determining a student's strengths and weaknesses in written language.

## Spelling

A student's ability to recall, that is, spell words on dictation, as well as to recognize incorrect spelling, or proofread, needs to be included in the spelling assessment. Teachers must take note of the particular spelling skill that a test measures. It is one task to recognize an inappropriately spelled word, but it is quite another task to spell the word correctly given a verbal prompt.

A student's work sample, which usually includes book reports, weekly spelling tests, and written assignments, should be analyzed to assess his or her spelling accuracy. A discrepancy may exist between the student's measured abilities on formal tests and his or her classroom performance. This kind of information can have a significant impact on learning needs and diagnostic decisions.

In addition to spelling skill levels, assessment of the kinds of strategies a student applies to remembering the spelling word, such as vocal rehearsal, visualization, and writing the word, is valuable. Both observation and interview techniques may help determine how a student memorizes the spelling words.



### *Application Skills (Word Problems)*

When assessing a student's ability to solve word problems, evaluators need to consider the material's levels of concreteness, complexity, and readability and compare them to the student's corresponding abilities. Students with language impairments may have a difficult time understanding questions presented in story problem tests. Figure 28, "Word Problem Assessment," graphically portrays the three skill levels at which students perform when solving word problems: their developmental level, their reading and language level, and their cognitive level. Measurement of the developmental level places the student on a continuum that analyzes his or her way of thinking, from the concrete to the abstract. The continuum of the reading and language level shows the student's progress from basic to analytical reader. Measurement of the cognitive level determines the kind of thinker a student is, on a continuum of fundamental to sophisticated thought. These three continuums measure the skills separately, but the skills themselves operate simultaneously. Readers will note that the subskills of the three levels being assessed correspond to the nine mathematics deficit areas that appeared in chapter 3. Evaluators need to assess the location of the student on each continuum in order

to make a complete assessment. Focusing on only one area can lead to an incorrect or inaccurate determination for criteria and remediation.

### *Potential Problems in Mathematics Assessment*

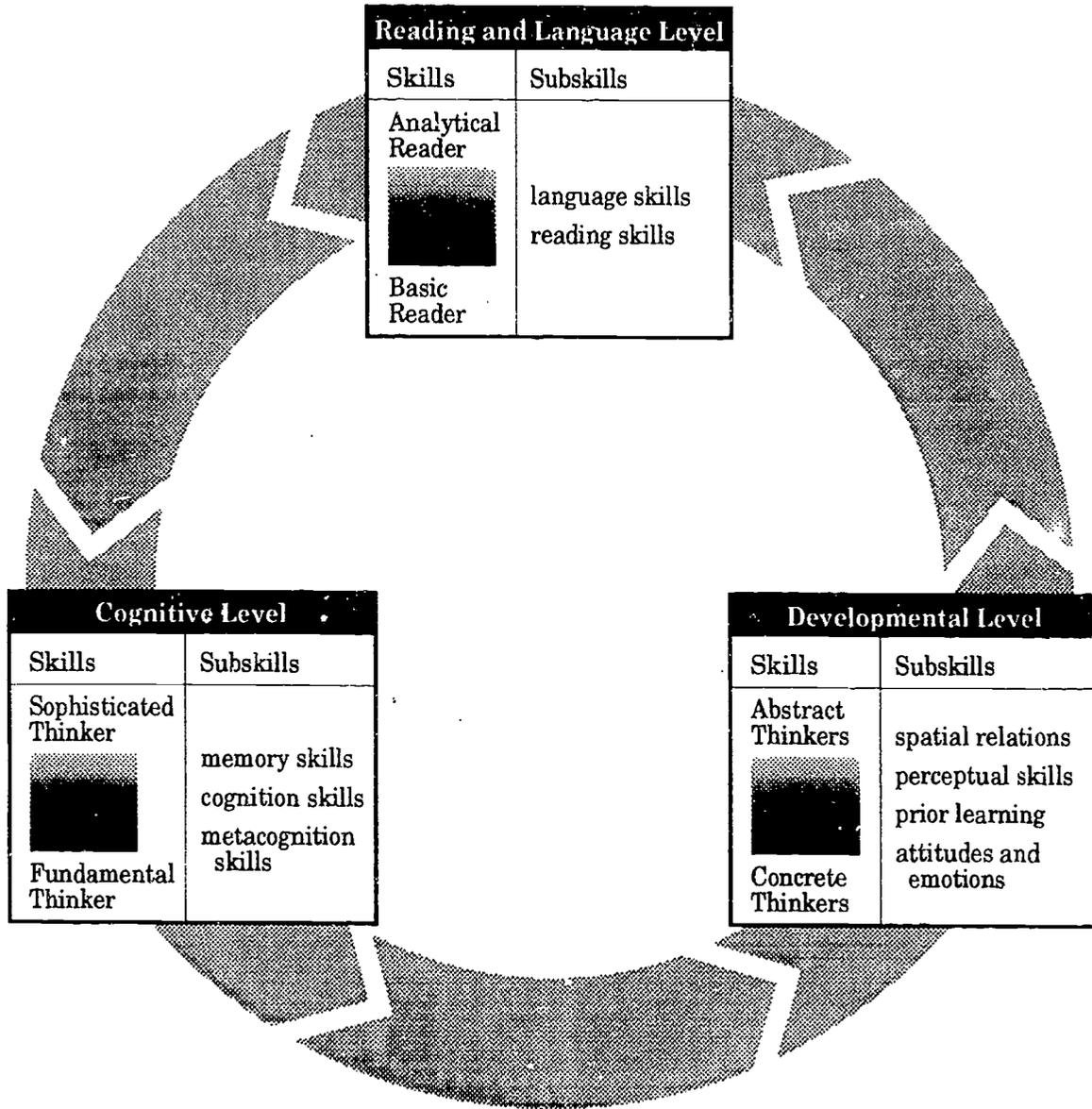
**Curriculum Match.** Mathematics curricula vary, making diagnostic devices problematic when used as part of the evaluation. Efforts should be made when using these diagnostic tools to evaluate their relationship to the curriculum to which the student has been exposed.

**Decision-making Match.** In a similar manner, norm-referenced tests do not necessarily match the curriculum of the school the student attended. Evaluators should never use a norm-referenced test as the sole criterion for determining eligibility.

**Predictive Validity.** Most evaluations do not test a large enough sample to generalize from the student's performance on specific test items to the student's skills in a variety of mathematics facts and concepts. The evaluation team should remember that these assessment tools only provide a portion of the information on which eligibility or instructional decisions are made.

Figure 28

**Word Problem Assessment**



## *Assessment in Learning Process*

Processing deals with the way the student receives and integrates information. Hessler (1984) refers to "processing abilities" as any type of central organization or manipulation of stimuli that may be verbal or nonverbal, visual or auditory, or successive or simultaneous in nature. By definition, students with LD will experience a processing deficit(s) that is manifested in the way they organize and understand material.

### **Psychological Processing (In-Child) Deficits**

In-child deficits may occur in any of the three definable stages within the processing sequence involved in learning: input, central processing, and output.

#### *Input*

The student's processing of inputs develops most rapidly when the child is in elementary school. Relevant behaviors include selective attention, perception, organization or categorization of inputs, and storage of sensory inputs. Assessment involves analysis of ability to attend to task, immediate recall and use of environmental stimuli, interpretation of an event or situation, and explanation of how new information relates to previously learned information. This stage of learning more than either of the others is influenced by the philosophy, curriculum, and techniques of instruction used in the general education classroom.

#### *Central Processing*

This stage of in-child deficit involves the internal processing functions, those cognitive and metacognitive functions that permit students to relate the information to their short- or long-term memory; to determine if the new information affects old information; and to build, relate, and use new information. In this stage, the student makes associations, establishes a short-term or working memory, applies deci-

sion-making behaviors, and assesses his or her ability to manage learning and behavior. The ability for these skills forms in infancy, and a student's strengths and weaknesses at this stage are often difficult to decipher because these skills are dependent on input and are only visible through output. The skills within central processing are also interrelated, resulting in difficulty in determining which skill is deficit. For example, a student who perseverates (dwells endlessly) on a topic of conversation may do so because the auditory input did not match her or his auditory weakness. Or, it may be because the student was unable to associate the input with specific, relevant information in memory. A final possibility is that the student did not know that the decision to pursue the topic endlessly was unnecessary.

#### *Output*

This function refers to the student's demonstrated use of the input received and the analysis that his or her central processing function applied to that input. The actual behaviors and actions of the student represent these outputs. Output functions are not fully developed until well into adulthood. Disabilities in this stage are manifested in inconsistent behaviors; strong memory skills in mathematics with poor memory skills in reading; ability to tell the steps in problem solving, but inability to use them to solve a problem. Task analysis is a significant key to unlocking output dysfunctions. Teachers need to be masters of the art of analyzing a behavior to determine the tasks needed to perform that behavior. In addition, students can be taught to monitor, manage, and manipulate the weak aspect of a particular function. This makes the task analysis extremely important to the student's lifelong learning.

Processing strengths and weaknesses are measurable but are best analyzed informally through student performance on academic and nonacademic testing. The correlation between processing deficits and academic performance should be noted by the evaluator. Figure 29, "Skills Association," shows how specific processing skills may be connected to specific academic skills.

Figure 29

## Skills Association

### Academic Skill

Math (application)

Written language

Decoding

Word recognition

Reading comprehension

### Processing Skill

Verbal reasoning

Visual perception

Verbal conceptual (ideation)

Auditory discrimination

Auditory memory

Visual memory

Verbal conceptual

Verbal reasoning

Memory

Knowledge of the process required for subtests of a large assessment tool is valuable to strengthen or verify a diagnostic impression. For example, a student's poor visual memory may have an impact on his or her word recognition and spelling skills. Performance on a single subtest may require various processes and strategies. Evaluators can make their best conclusions about a student's processing abilities if they analyze numerous subtests and identify patterns of behavior. Psychological testing may uncover valuable processing information. This data is useful in citing consistencies and inconsistencies with other measures of performance.

In many cases, a student showing processing deficits may have an associated behavior problem. When processing and behavioral factors are both evident, the evaluator must examine the weight each has on performance and identify any causal relationship. For example, a student's poor basic skills are likely to cause a motivation problem.

Students with processing deficits may compensate by using their stronger modality to learn a concept or skill. The processes used to master a skill may vary from student to student. For example, a student with poor visual memory may spell a word out loud and remember it through the stronger auditory channel. Evaluation should include statements about a student's processing strengths as well as weaknesses. Effective delivery systems build upon student strengths and provide assistance where deficiencies exist.

## Learning Styles

The manner and circumstances in which a student acquires and uses concepts and skills defines a student's learning style. Learning style addresses a variety of factors. Inventories, interviews, questionnaires, and observations are perhaps the best methods to determine a student's style of learning (see chapter 6). The primary areas to consider in defining individual learning styles include modalities, personal characteristics, and learning environment. The primary modalities to consider, independently and interactively, are auditory, visual, and kinesthetic. Personal characteristics that relate to learning include motivation, optimal learning times, and preferred social climate for learning. Learning environment preferences include specific sites, structures, lights, sounds, temperatures, stimuli, and preferred blocks of learning time. Understanding the manner in which the student best receives and retrieves information will guide the teacher in developing optimal conditions for learning and provide the student with better self-understanding.

The manner and circumstances in which a student acquires and uses concepts is often referred to as "learning style." The way in which learners approach tasks may be influenced by teacher, curriculum, and setting variables. Analysis of how these variables affect learning should be part of any assessment. For example, a child may be able to select but not generate

the correct response. The learner may be easily frustrated or approach problem solving randomly rather than systematically. Sometimes students can complete a task with teacher guidance but cannot do it independently. Often adolescents can understand a lecture, but are unable to take notes or read the textbook. Observing these individual differences can help teachers design an IEP to address students' unique characteristics.

## Learning Strategies

Where learning *style* reflects a student's preference or choice of learning situations, learning *strategies* are defined as techniques, principles, or rules that will facilitate the acquisition, manipulation, integration, storage, and retrieval of information across situations and settings. Learning strategies are the effective methods an individual uses to learn. Examples of learning strategies include verbal rehearsal (repeating aloud), mnemonic devices, thinking aloud, note-taking, using time reminder cards, outlining passages, highlighting, visualizing, and generating questions.

Many learning strategies are acquired but are not directly taught. Students with LD often are deficient in their ability to employ effective strategies for learning. Information about the kind of strategies a student uses will be useful for planning individual learning and goal setting. The types of strategies a student uses may vary from one curriculum area to another. The social climate, environment, type of academic demands, and the style of teaching may account for discrepancies across curriculum. Learning strategies can be assessed through observation and interviews of the student.

## Social, Affective Skills

A learning disability may significantly influence a student's social skills as well as academic functioning. If children with learning disabilities fail in their peer relationships during adolescence, their adult social life may be as seriously hampered by this lack of skill as is their inability to read, solve mathematics problems, or write a letter of application. Social skill characteristics typically found in students with learning disabilities are the following:

- Low motivation
- Gullibility

- Perseveration
- Constant aversion
- Poor self-esteem
- Extreme difficulty in starting a task
- External locus of control
- Suggestibility
- Poor concentration
- Overreaction to stimuli
- Inappropriate aggression
- Poor social judgment
- Distractibility
- Inflexibility
- Poor communication skills
- Lack of confidence
- Poor interpretation of social situations

Through interviews and observations, the evaluator should address the student's social functioning and the impact it may be having on classroom performance and behavior. Social skill information can be integrated with background information, classroom observation, and interviews, or it can be listed as a separate entity. Additional methods in assessing a student's social functioning include the use of sociometric techniques, peer and self-evaluations, parent interviews, and role playing. Currently none of these procedures has emerged as the best assessment method. It is advisable to use a combination of them.

## Assessment for Transition

The goal of transitional programming is to assist individuals with disabilities to bridge secondary school environments to postsecondary training or employment. Collaboration and cooperation among administrators, agency staff, special educators, vocational educators, students, parents, guidance personnel, and employers is critical to comprehensive transition planning.

A needs assessment plays an integral part of transitional planning. IEP team members will need to compile data about a student's vocational and academic interests, aptitudes and achievements, functional and basic skills, financial and medical needs, social and emotional functioning, personal management, and overall independence needs. Evaluators need to obtain information on an ongoing basis and share it with outside agencies involved in the student's transitional program. Assessment measures should include formal and informal

testing, surveys, observations, student and parent interviews, questionnaires, or other information compiled by school personnel and outside agencies.

School personnel may gain access to and generate information about a student's needs, abilities, and functional levels, relative to transition through

- ecological assessment procedures,
- transitional IEP development, and
- interagency collaboration. (See appendix F for more information.)

The DPI's Exceptional Education Mission Team offers an excellent collection of materials entitled, *Developing IEPs Which Incorporate Transition Services*. (1993) It includes definitions, checklists, and four samples of IEP statement writing that focus on responsibilities and linkages for transition. See appendix A for contact information.

## Ecological Assessment

Ecological assessment helps students identify their interests and goals by providing relevant community and school experiences. This assessment procedure also encompasses assessment of aptitudes, interests, achievements, and attitudes at work sites and in various other environments. Ecological assessment has the three following goals:

- It should enable students to understand their strengths, weaknesses, and career interests. This includes analyzing the job market and determining the necessary training and education for the relevant career fields.
- It should provide instructors with information about what instructional methods or needs a student requires in order to meet his or her career goals.
- It should provide students with community experiences and daily living skills relevant to their interests and needs.

## Transitional IEP Development

A key element in developing appropriate transitional goals is obtaining accurate information about a student's present ability levels, academic and vocational interests and aptitudes, and overall independent living skills. The transition services that the IEP team designs must include needed activities in the areas of

- instruction (on transition services),
- community experiences,
- the development of employment objectives,
- the development of other postschool adult living objectives,
- acquisition of daily living skills, if appropriate, and
- functional vocational evaluation, if appropriate.

If the IEP does not include any of these components, it must document the reasons for the exclusion.

## Interagency Collaboration

Interagency collaboration allows school personnel to gain access to and exchange pertinent information with outside agencies. Educators may wish to use a prepared data summary guide when exchanging information with other professionals. These professionals from the community could participate in the transition IEP meetings, along with the individuals who are required to attend. Figure 30, "Participants of a Transition IEP," follows, providing examples.

Figure 30

### Participants of a Transition IEP

#### Required Participants

the student  
the parent(s) or guardian  
special education teachers  
a representative of the public agency  
a representative of any other agency that is likely to be responsible for providing or paying for transition services

#### Optional Participants

a vocational education teacher  
a vocational education administrator  
an employment for education coordinator  
an orientation and mobility specialist  
a Job Training Partnership Act (JTPA) teacher or representative  
a Division of Vocational Rehabilitation (DVR) counselor  
an employment services provider  
a developmental training provider  
a mental health representative  
a Division of Community Services case manager  
an independent living center representative

## Vocational Assessment

Appropriate vocational assessment allows students to discover which occupations they prefer and which programs suit them best. A variety of models for doing vocational assessment exist in the schools. They include Designated Vocational Instruction, Curriculum Based Vocational Assessment (CBVA), and others. Just as formal transition planning cannot occur without using vocational assessment data, vocational assessment results are relatively meaningless unless they contribute to transitional planning. The following material relates to components of a vocational assessment that can be carried out in the school setting.

### *Components and Methods of Vocational Assessment*

Vocational assessments should include the analysis of a broad range of student skills and abilities that affect functioning during training, on the job, and in the community. Evaluators should analyze vocational aptitudes and interests, work behaviors, physical abilities, intellectual abilities, and job-seeking skills.

A variety of formal and informal methods are available for use in a vocational assessment. These methods include medical, psychological, educational, and social assessments, interviews, informal teacher assessment, standardized vocational aptitude and interest tests, work samples, behavioral and observational assessments, career exploration, exploratory job placement, job tryouts, and situational assessment and vocational counseling.

The designated vocational instructor (DVI) may be involved in vocational assessment and interpretation, and should promote the use of assessment results in determining individual programming. Post assessment conferences (such as an IEP) determine the support that students receive. The DVI may begin supporting the student or instructor immediately or monitor student progress to determine the extent of support services needed. *Designated Vocational Instruction: A Resource and Planning Guide* is a helpful resource for educators conducting vocational assessment. (Gavin, et al., 1993)

### *Timing of Assessment*

Vocational assessment is an ongoing process for identifying needed skills and information.

The designated vocational instruction model uses a series of five critical junctures. Generally, most vocational assessment uses steps or stages to determine a student's level of awareness, involvement, and preparation for careers. Albright and Cobb (1988) have organized the Curriculum Based Vocational Assessment with data collection procedures that focus on the following three critical junctures or phases.

• **Phase I/K-8 Phase:** Data is collected before individual students enter vocational programs or courses to help them select appropriate programs.

Phase I requires data collection, mainly lists of student-centered variables, that will help educators document student remediation needs. A student profile should provide a format that can systematically document student competencies. The profile categorizes information according to

- personal characteristics,
- work tolerance factors,
- performance skills,
- functional academic skills,
- time and travel factors, and
- medical concerns.

• **Phase II/9-12 Phase:** Data is collected while students are enrolled in a high school vocational program to monitor progress.

Phase II data is used to monitor student performance within the vocational education classroom or lab setting, thus identifying potential problems that could cause the student to fail the course. Performance factors fall into three categories: behavioral, academic, and progressive (toward exit level criteria). To identify the skills to monitor, the evaluator should refer to the competencies established in the first phase. Data collection formats should include

- competency based checklists,
- task performance checklists,
- student progress charts, and
- behavioral rating scales.

• **Phase III/Exit Phase:** Data is collected before students complete their programs in conjunction with transitional planning.

Phase III transitional planning begins just before a student completes his or her vocational education program. This third phase of curriculum based vocational assessment identifies the student's future needs to ensure that appropri-

ate transition planning can occur. Some issues to address at this time are

- student success in exit level criteria in current programs,
- future training options,
- future employment options,
- current occupational interest levels,
- current vocational aptitude levels,
- postsecondary student goals, and
- formal transition team membership.

Like comprehensive transition planning, curriculum based vocational assessment is a collaborative effort. When schools implement CBVA, involved staff need to understand their roles. Instructors need to coordinate assessment information and use the IEP process as the delivery framework.

When discussing the timing of assessment, it would be remiss to forget that early adolescence, especially the middle-school years, is a unique developmental time for students. As noted in the DPI publication *A Guide to Middle School Curriculum Planning in Exploring Life's Work*, "Researchers have found that, during this stage [early adolescence] youngsters undergo more developmental change than at any other time of life, except for the first year after birth." This pivotal time in a student's development requires educators to directly connect the lessons learned in the classroom to the realities of a young adolescent's life. Students "constantly ask how every learning activity relates to their everyday questions and concerns, and they want to know how they will benefit from learning it." (Smelzer, 1991) Educators assessing students at this developmental level may find this publication helpful when determining technically adequate tests for transitional assessment.

### **Assessment for Postsecondary Education**

From 1976 to 1986, the number of students with learning disabilities who enrolled in a technical college or university increased tenfold and now make up more than 1.2 percent of the total freshman class, nationwide. (*Learning Disability Update*, 1986) The postsecondary education setting is different from the typical high school environment, and students with LD are likely to need preparation in order to adjust adequately. The number of hours in class, the number of hours required for independent study time, the

increased freedom and reduced structure in attendance policies, test taking, assignment completion, and quality of work are significant changes for which teachers must prepare students. Assessment of each student's readiness for these changes is essential in order to establish a transition plan that will meet the student's needs.

S.F. Shaw and colleagues describe a study skills curriculum to promote independent and responsible learning. Educators could develop an informal assessment tool from their model, shown in figure 31, that would include organization skills, learning strategies, self-awareness, and responsibility.

Figure 31

#### **Shaw's Study Skills Curriculum Model**

##### **Organization**

- Brings necessary supplies and materials
- Keeps neat and organized notebooks
- Uses an assignment sheet
- Plans with a monthly calendar

##### **Learning Strategies**

- Outlines and takes notes
- Uses effective memory techniques
- Employs successful test-taking techniques
- Applies study methods including time analysis
- Knows library skills
- Knows word processing skills

##### **Self-awareness**

- Understands skill strengths and weaknesses
- Knows both short- and long-term personal goals
- Understands grading options
- Conferences with teachers
- Reassesses goals
- Knows his or her abilities and disabilities well enough to explain them and request specific accommodations

##### **Responsibility**

- Completes work consistently
- Takes notes and keeps records accurately
- Uses adequate test preparation habits
- Communicates concerns
- Takes responsibility for problem solving (Shaw et al., 1991)

Students with LD who are preparing to enter college should be knowledgeable about Section 504 of the Rehabilitation Act of 1973, of their rights under that law, and their access to those rights. For example, a college's admission officers must consider if a student with a disability is "otherwise qualified" for admission. That is, the officer must determine if the student, if it were not for her or his disability, might otherwise meet the admission requirements.

This understanding of modifications and accommodations is an essential consideration for students when they take standardized tests, such as the Scholastic Aptitude Test (SAT) and the American College Test (ACT). These tests may be modified for people with disabilities. In addition, they may not be adequate indicators of the potential of a student with a disability for successful completion of college work.

While students with disabilities have a right to confidentiality, accommodations and modifications are clear indicators to colleges of a student's unique needs. Students with LD need the skills and knowledge to work with others so they can acquire the appropriate accommodations for admission to college and complete the necessary course requirements. Subpart E of Section 504 details the requirements for accommodations in admissions, recruitment, academic adjustments, and auxiliary aids.

A valuable resource for students with LD considering postsecondary education is a book published by the Wisconsin Council on Developmental Disabilities and the Wisconsin Department of Public Instruction titled, *Wisconsin Educational Opportunities Beyond High School: A Guide for All Students Including Those Needing Adaptations*. See appendix A for more information about this helpful book.

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A variety of programs offer students with learning disabilities an appropriate education in regular education classes. This integrated programming promotes peer relationships, regular education ownership, improved teaching techniques, generalization of new skills, curricular continuity, and cognitively appropriate instructional approaches.

A description of program models operating in schools in Wisconsin follows in this chapter. For reporting purposes, these programs carry a variety of program type labels. They are innovative, unique, or successful ideas that educators could replicate with modifications appropriate to their specific building and personnel. Given the individual nature of schools, it will be necessary for teachers to modify models to suit the needs of students in their programs.

In Wisconsin, funding of special education programs in many states includes state-appropriated categorical funds. This funding mechanism requires that special education units—a special education teacher assigned to a specified number of students—report by category, by program type, and by program level. *Category* refers to the area of disability or its related service. *Level* refers to the range of grade levels served, such as primary or wide range secondary. *Type* refers to either self-contained, resource, or itinerant programs. Self-contained programs have three distinctions—complete, modified, and integrated—and each distinction describes the amount of the student's special education. A

resource program type allows the student to receive a majority of his or her instruction in regular education. An itinerant program comprises special education teachers who travel from school to school. In Wisconsin, approximately 24 percent of the LD units are self-contained integrated (SCI), and 75 percent are resource. In an SCI program type, the students receive a majority of their instruction in special education.

An LD resource room may include students with a variety of program type needs. The local school district determines a unit's label, based on a knowledge and understanding of the students in the unit and the way the unit operates.

At the end of this chapter, readers will find a brief descriptive listing of other states' efforts. For reasons of time and practicality, the author of this guide could not include every outstanding program that exists. Figure 32, "LD Model Program Information," a form for sharing information with the DPI about program models, is located at the end of this section. The author encourages districts to use this form.

Readers should note that in this chapter the programs and models are clustered by kind rather than grade level, and some of the kinds overlap. Educators may, therefore, focus on the programs and their design and adapt them to grade level as needed. Readers may also generate modified designs to suit specific needs. The following list outlines the programs described in this chapter.

**Skill- or Subject-Focused Programs and Models**

- Academics
- Content Areas
- Vocational

**Strategy-Focused Programs and Models**

- Behavioral
- Affective
- Communication
- Learning

**Integration-Focused Programs and Models**

- Co-teaching
- Collaboration
- Consultation
- Partnerships

**Other Programs and Models**

## *Skill- or Subject-Focused Programs and Models*

### **Academics**

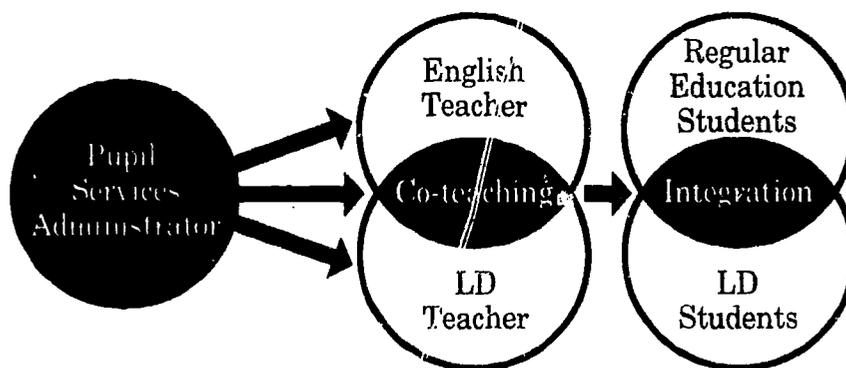
#### *Trends in Communication*

**Grade Level:** High school seniors

**Description:** This semester-long English class is for high school seniors and focuses on a regular curriculum that explores oral, written, and visual forms of communication. The students engage in cooperative settings involving pairing and teaming. Team projects include videotapes, auditory recordings, team-made visuals, written scripts, and prompts. Reading is done in class with overheads and text highlighting. Testing is oral and incorporates multiple styles, paired test-taking, and peer evaluation. Integration of skills evolves naturally. About 18 students (40 percent exceptional education students) are in each class.

**Roles:** A regular educator and an LD teacher team-teach. The former is considered the content specialist, and the latter is the learning specialist. With support and follow-up by the pupil services administrator, the two teachers have release time to co-plan and prepare their lessons. This administrator also conducts follow-up and provides general support. The teachers share routine activities such as establishing classroom rules and grading.

**Goals:** Successful integration of students with LD into the regular education English class is a natural by-product of the cooperative teaching and learning.



#### **Program Contact:**

Deb Parman, Exceptional Education Teacher  
Beaver Dam Unified Schools  
500 Gould Street  
Beaver Dam, WI 53916  
(414) 885-9241

## Content Areas

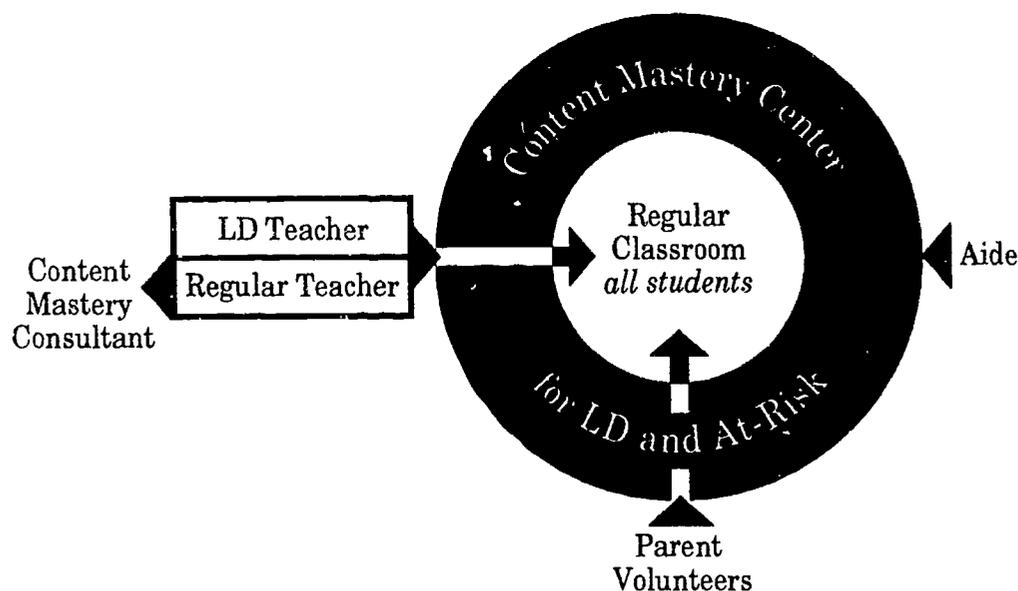
### *Content Mastery*

**Grade Level:** K-12

**Description:** Content Mastery (CM) is a support system for students in kindergarten through grade 12 who have learning disabilities or are at risk academically for other reasons. Students, with assistance, master the essential elements of their classes, make the highest grades possible, cope with their strengths and weaknesses, and learn independent study skills. The students remain in the regular classroom for all instruction and participate in most classroom activities. The CM center is a classroom reserved for the purpose of supplementing the student's learning style by using specially prepared materials and staff support services. Students come to a CM center on an "as needed" basis; they are not scheduled into the center.

**Roles:** The LD teacher is the CM teacher and shares all parts of the teaching and learning process with the regular education teacher(s), including lesson plans, routine duties, conferences and materials preparation. Some team-teaching occurs. Materials in the CM center are available for regular classroom instruction. The CM program often needs a full-time aide to assist in the preparation of materials and supervision of the CM center. Some programs include parent volunteers. Training workshops are essential to prepare the Content Mastery teacher for this role. Support from a CM consultant, program support teacher, program supervisor, or building administrator is essential to the success of this model.

**Goals:** Statewide parent, student, and teacher surveys indicate positive results occurring in Content Mastery programs. Reports indicate that some students may achieve more academic progress in the Content Mastery Program than in any previous resource model.



**Program Contact:**  
Content Mastery Consultant  
15260 Cascade Drive  
Oconomowoc School District  
Elm Grove, WI 53122  
(414) 567-6632, Ext. 240

## Vocational

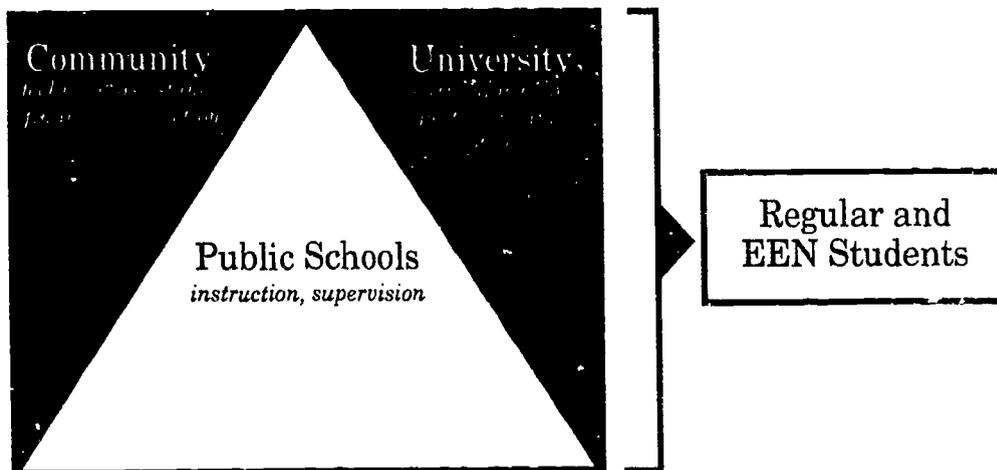
### *Urban Rehabilitation Project*

**Grade Level:** Grades 11 and 12

**Description:** With the goal of entry-level job opportunities in construction, this program serves a mix of secondary regular and exceptional education students. The students translate theory into practice with on-the-job experience as construction helpers in electrical, plumbing, heating, air conditioning, ventilation, and general construction areas. Technical education classes precede the on-the-job experiences for eleventh and twelfth graders. Ultimately an inner-city house is constructed for resale.

**Roles:** The program combines the services of community resources, a college, and the public school. A project advisory council continuously reviews the program's direction and effectiveness. The Community Development Corporation and an industrial council provide financial and technical support. Curricular advice and postsecondary placements come through the University of Wisconsin-Platteville and local technical schools. Instruction and supervision are the responsibility of the public schools. The industrial arts supervisor, two regular education teachers, and one exceptional education teacher serve these roles.

**Goals:** The program enhances the employability of these students because their skills were learned in classrooms. For example, students assess the needed reconstruction and plan the resale of the house. Concrete learning and applied learning are the cornerstones of this program. Its users report a high level of student motivation and self-esteem.



**Program Contact:**

Dr. Robert A. Laures, Ph.D.  
Assistant Principal, Milwaukee Public Schools  
Custer High School  
5075 North Sherman Boulevard  
Milwaukee, WI 53209  
(414) 461-6600

## Vocational

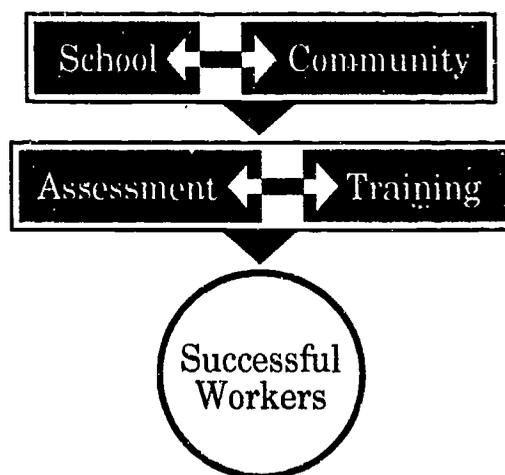
### *Career Assessment and Training Program (CATP)*

**Grade Level:** High school

**Description:** Milwaukee Public Schools established partnership contracts with several community worksites in order to better prepare EEN students for gainful employment through assessment and training. The mix of large sites, such as hospitals or colleges, and smaller sites, such as schools or Habitat for Humanity, allow for a variety of assessment and training opportunities in the areas of clerical service, food service, environmental sciences, grounds and maintenance, and graphic design, among others. The program is open to all EEN high school students with assignments based on need. The minimum assessment period is half days for six weeks.

**Roles:** Teachers and paraprofessionals trained in job development, job training, and vocational assessment conduct on-site analysis and provide instruction, counseling, training, and assessment to small groups of students.

**Goals:** The goal of this program is to provide the career or vocational assessment and training that will assist a student in making a successful transition from school to the world of work.



**Program Contact:**

Sharon Grant  
Milwaukee Public Schools  
P.O. Drawer 10K  
Milwaukee, WI 53201  
(414) 475-8139

# Strategy-Focused Programs and Models

## Behavioral

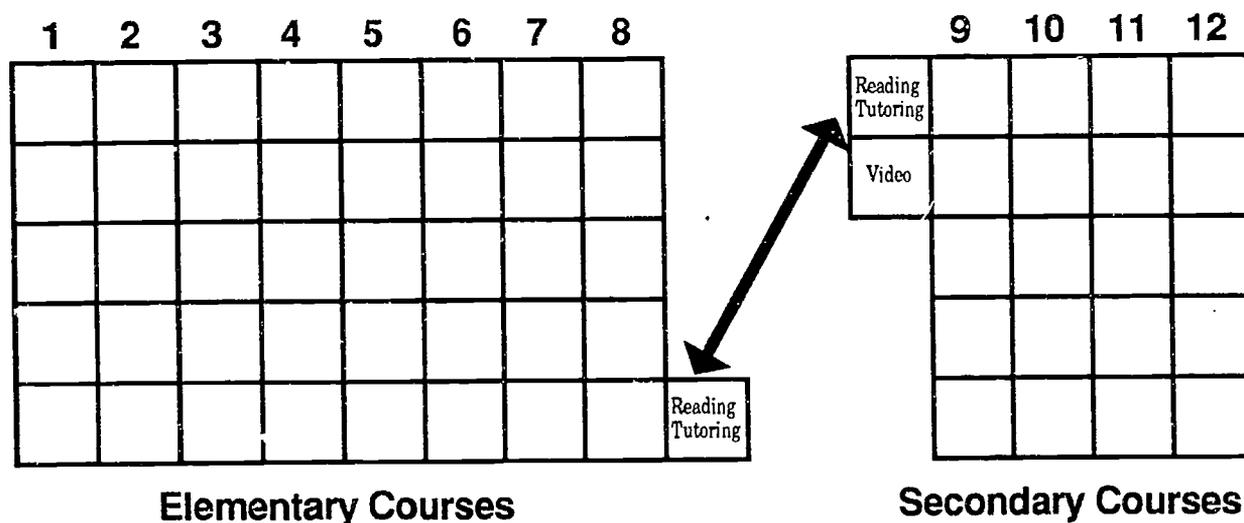
### Alternative Classes

**Grade Level:** High school

**Description:** The program consists of two academic class alternatives. One involves a video production class in which high school students learn teamwork and the basics of handling video equipment. The other is cross-age tutoring where the high school exceptional educational needs students train to tutor first grade students with Chapter I status in reading skills. Both programs require the students to engage in a variety of learning and social communication activities.

**Roles:** The video production class fosters student interaction with regular education teachers, administrators, parents, and community members. To develop this program, teachers receive staff development time during the summer months. The district provides support for the purchase of equipment such as a camcorder, VCR, and computer. The tutorial program develops student abilities in the areas of working with younger students, communication, and cooperation. Student questionnaires, teacher observations, attendance reports, and grade reports support the effectiveness of the two alternative courses. Additionally, the Pulaski school district reports that the two courses have grown increasingly popular.

**Goals:** Improved motivation, self-esteem, and work quality are the major goals of this program for high school students with learning and emotional disabilities.



**Program Contact:**  
 Randy Fondow, Special Education Teacher  
 Pulaski Community Schools  
 911 South St. Augustine Street  
 Pulaski, WI 54162-0036  
 (414) 822-3191

## Affective

### *Social / Emotional Growth*

**Grade Level:** K-5

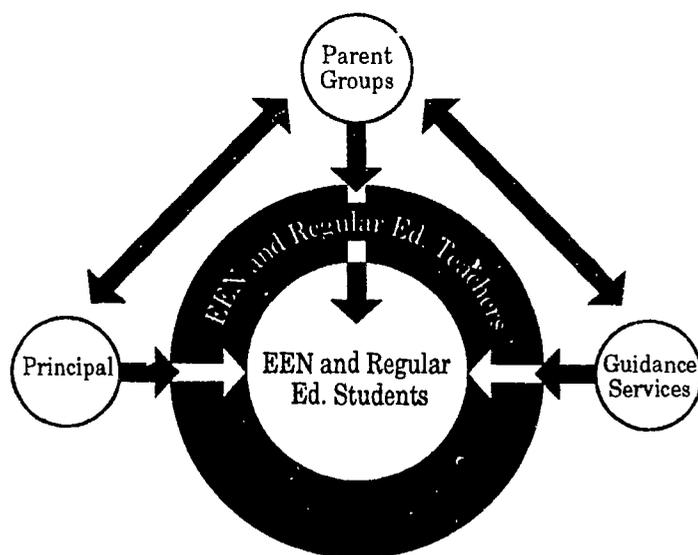
**Description:** This is a program model that coordinates the many activities occurring within a school district that focus special attention on individual student needs. By coordinating the multiplicity of efforts within the school and community, the district delivers better services more efficiently to students than do traditional models where several activities operate independently.

**Roles:** Co-teaching and collaboration occur between regular education and exceptional education teachers. Teacher assistance teams meet immediate classroom needs. Guidance services, social skills, and self-concept components are major parts of the total program. Parents play visible and supportive roles; namely, as classroom volunteers and classroom speakers, in Families And Schools Together (FAST), evening support groups, Parent Advisory groups, and Effective Parenting classes. The principal is an integral part of all of these groups.

**Goals:** This program has three major affective goals for exceptional education students and students who are at-risk in grades kindergarten through 5:

- to develop a school community where all persons participate in planning and implementing the program,
- to advocate for social acceptance and value of all people, and
- to create a learning environment that includes family and community involvement and current research.

Evidence of the program's success exists in improved measurements of self-concept and achievement. Parent and teacher survey results also indicate the success of this program. Informal reports of students' positive attitudes toward school, appropriate social relationships, and increased risk-taking also denote the worth of the program.



**Program Contact:**

Wayne Disch, Principal  
Ashwaubenon School District  
Pioneer Elementary School  
1360 Ponderosa Avenue  
Ashwaubenon, WI 54313  
(414) 492-2920

## Communication

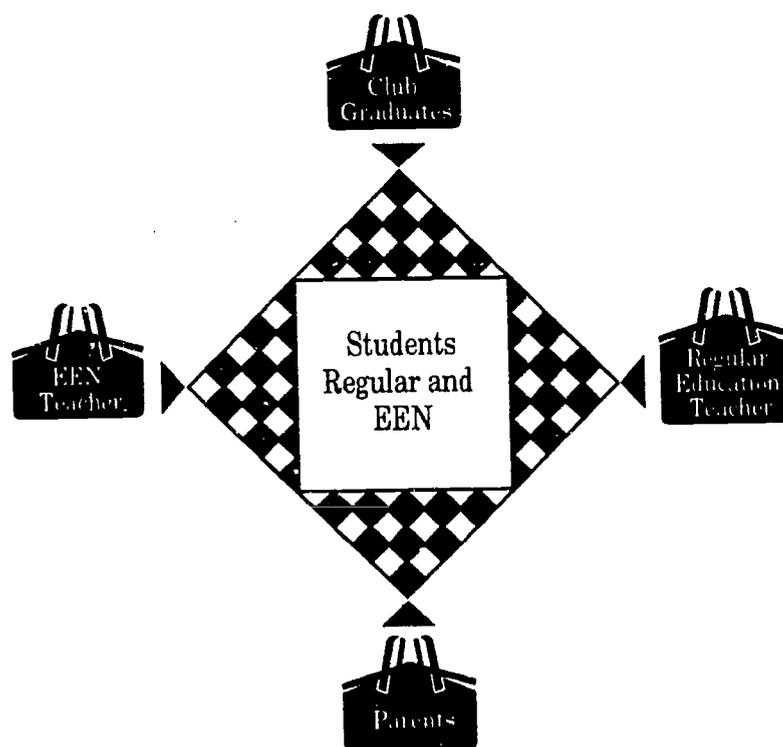
### *Picnic Club*

**Grade Level:** Grades 1-2

**Description:** With the premise that the pragmatics of communication can best be practiced in a natural environment, the "Picnic Club" was born. Over lunch, (not necessarily an outdoor picnic) first- and second-grade students with learning disabilities, as well as other EEN and regular education students, learn and practice such skills as following topic, turn-taking, and eye contact. The students with learning disabilities also have opportunities to develop and practice strategies for sequence and memory in this informal, supportive environment. The classroom teachers recommend students for participation.

**Roles:** Two staff members run the "Picnic Club" once a week for 30 minutes during the lunch period. One teacher interacts with the students while the other assesses desired behaviors. Participants use a teacher-made "Picnic Club" activity book. Parents are asked to reinforce desired skills.

**Goals:** Positive reinforcement is evident in the club. Students receive weekly feedback. During the six weeks, the students also practice their pragmatics during a field trip. At the end of each cycle, a graduation program is held. Graduates are asked to informally monitor current club members' progress in the school environment.



**Program Contact:**

Karen Neas, Special Education Director  
School District of Beloit Turner  
1231 Inman Parkway  
Beloit, WI 53511  
(608) 362-9104

## Learning

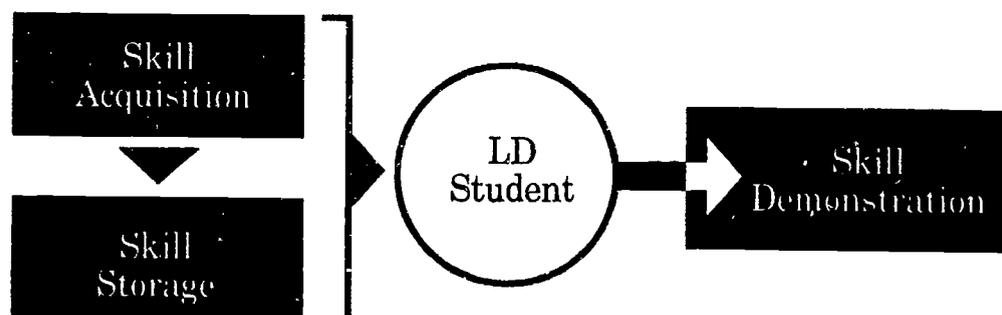
### "How To" Strategies

**Grade Level:** Secondary level

**Description:** Learning strategy programs help secondary students focus on ways to learn and ways to effectively use what they have learned. These strategies are techniques, principles, and rules that enable a student to learn to solve problems and complete tasks independently. Curricula such as *The Learning Strategies Curriculum* allow students to effectively cope with curricular demands and generalize the skills to regular classroom and employment settings. Most of the skill levels that this program teaches start with a student's acquisition, move to storage and retrieval, and end with demonstration. Specific strategies include sentence writing, assignment monitoring, and test-taking.

**Roles:** In general, an EEN instructor within a resource room or skills center teaches the strategies. Students demonstrate their skills in a regular education environment or the larger community.

**Goals:** Studies conducted by Montague, Applegate, and Marquard (1993) report that the strategies training is effective for students with learning disabilities when skill transference occurs across settings and content areas. These programs specifically teach students cognitive and metacognitive strategies that most students are able to develop without formal instruction.



**Program Contact:**

Karen Prickette, Consultant - Adaptive Teaching/Learning Strategies  
Bureau for Educational Equity Programs  
Wisconsin Department of Public Instruction  
Madison, WI 53707-7841  
(608) 267-1070

# *Integration-Focused Programs and Models*

## **Co-teaching**

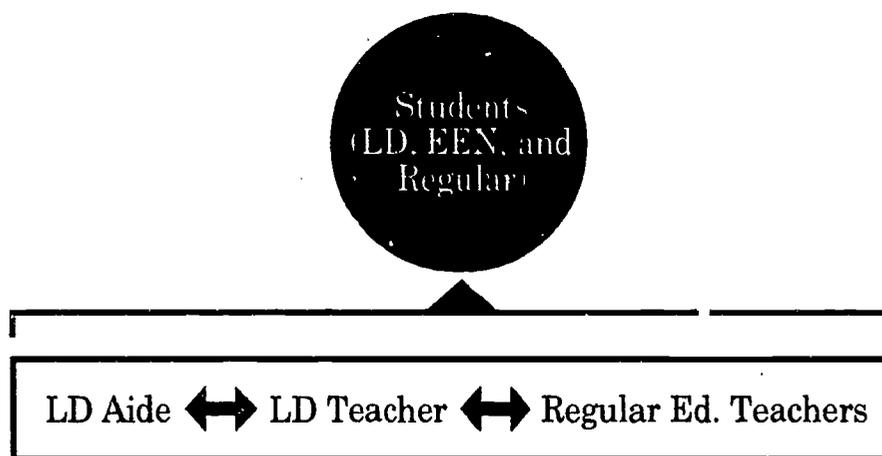
### *The Whole Picture*

**Grade Level:** Grades 1-5

**Description:** Recognized in 1992 by the Council for Learning Disabilities as exemplary nationwide, "The Whole Picture," a full-inclusion elementary program, serves students identified as learning disabled and certain other students with mild disabilities whose individualized education programs (IEPs) indicate they will benefit from this model. The school uses whole language as well as global education and thematic units as an instructional basis. A writer's workshop and the use of trade books develop basic skills in reading and writing at the maximum level possible for each student. Staff interact with students constantly, informally responding to their needs and formally planning conferences, group activities, and direct instruction. Sound and symbol relationships replace traditional phonics instruction.

**Roles:** The LD teacher co-teaches in first through fifth grade classrooms on a scheduled basis. This teacher provides recommendations about classroom interventions and modifications. A full-time teacher aide assists. The program requires the collaborative efforts of all staff in order to schedule staff time for students, peer coaching, and modeling or sharing good teaching practices. Individual or small, flexible group instruction based on learning needs replaces the large group lessons previously necessary for basal readers.

**Goals:** Results of this program include improvement of student self-concept, academic progress, high teacher and staff morale, superior building climate, and strong parental support. The natural support system in the building, coupled with the non-competitive philosophy of the learning environment, has yielded educational and behavioral growth for all. A three-year study of academic gains is currently underway, and preliminary data suggest that the students with learning disabilities are making expected or better academic growth. Parent and teacher surveys show an extremely positive response.



**Program Contact:**

Margaret Van Deurzen  
Learning Disabilities Teacher  
Wilder Elementary School  
2590 Robinson Avenue  
Green Bay, WI 54311  
(414) 391-2560

# Collaboration

## EXCEL

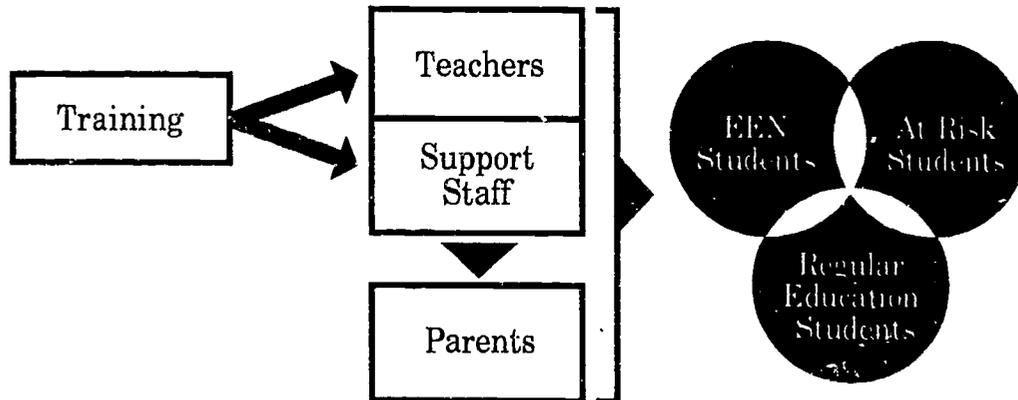
**Grade Level:** Grades 1-6

**Description:** The EXCEL program educates students in grades 1 to 6 who have learning disabilities or are at risk within regular classrooms. Essential elements of the program include special texts and materials needed to implement IEP goals. Each EXCEL classroom comprises 18 to 22 students. Effective education for all students is accomplished through curriculum modifications, integrated teaming of special and general educators, and individualized teaching.

**Roles:** As a collaborative program, EXCEL requires interaction among LD, regular education, speech and language, and reading teachers. Also involved are counselors, social workers, psychologists, health service professionals, program support teachers, and the principal. All of these professionals interact regularly and routinely to provide curriculum modifications, teaching strategies or methods, and evaluation tools. Teacher aides assist. This collaborative and interactive program requires staff to train for and provide problem solving, consultation skills, conflict resolution, cooperative learning, positive action programs, and whole language. Staff provide frequent follow-up information and weekly progress reports, which encourages parental support.

**Goals:** The program has several major goals, which include the following:

- To educate students with mild to moderate learning disabilities and at-risk students in the least restrictive setting as possible.
- To provide maximum support for students through curriculum modification, integrated teaming, and individualized teaching.
- To provide sufficient counseling, speech and language therapy, and psychological or social work services to meet learning-related needs.
- To increase academic achievement in all basic areas during the school year.



**Program Contact:**

John R. Dethloff  
Director of Special Education  
Beloit School District  
1633 Keeler Avenue  
Beloit, WI 53511  
(608) 364-6023

## Consultation

### *Peer Collaboration*

**Grade Level:** K-12

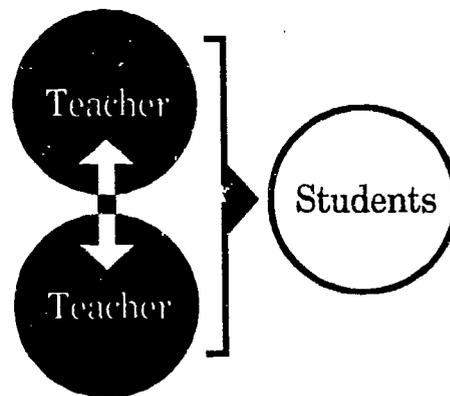
**Description:** This prescribed problem-solving method for teachers includes the following four major steps:

- describe the problem and ask clarifying questions;
- summarize the problem;
- develop at least three possible interventions, then make predictions of each; and
- develop a practical evaluative strategy.

Peer Collaboration teaches educators systematic strategies for solving classroom problems. The program's developmental research suggests the importance of less formal and more direct methods of helping regular education teachers solve mild academic and behavioral problems within their own classrooms.

**Roles:** Teachers work in pairs and follow a specific interactive structure and dialogue. Exceptional educational needs (EEN) teachers find that this empowerment of regular educators frees the EEN teachers to work with students whose disabilities require their more highly specialized skills. Empowerment also allows teachers of exceptional children to more completely participate in other activities such as in-depth consultation and direct instruction.

**Goals:** Data from the implementation of Peer Collaboration in several settings suggests that teachers who support the program's structure empower themselves and generate more solutions to problems within the framework. In addition, significant shifts in teacher expectations allow for greater tolerance of student variation within the regular classroom.



**Program Contact:**

Dr. Marleen Pugach, Assistant Professor  
Department of Curriculum and Instruction  
University of Wisconsin-Milwaukee  
P.O. Box 413  
Milwaukee, WI 53201  
(414) 229-4725

## Consultation

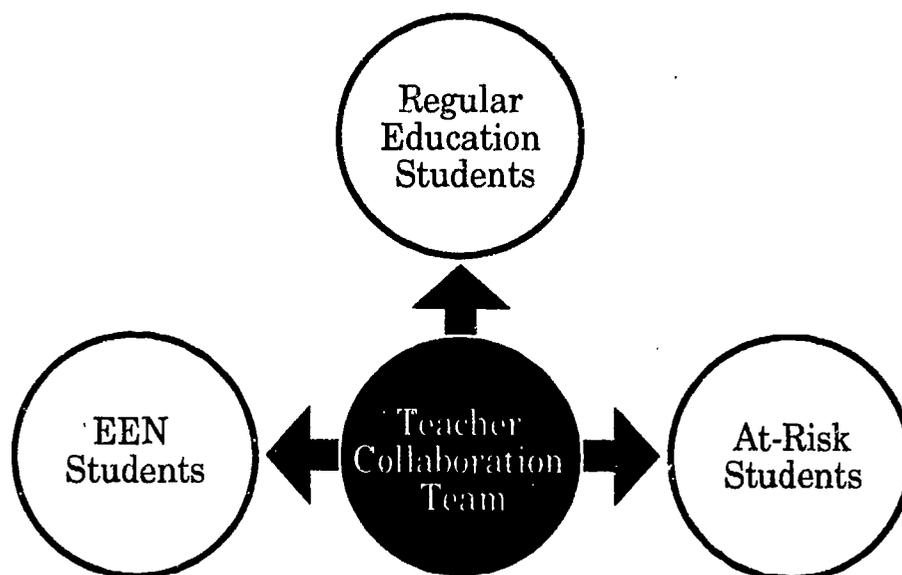
### *Teacher Collaboration Teams*

**Grade Level:** K-12

**Description:** This integrative and collaborative program reviews the needs of students with learning disabilities and provides modifications and plans. The teaming particularly fosters the development of integrated individualized education programs (IEPs).

**Roles:** Not only do the regular and exceptional education teachers team-teach, but they collaborate on instructional strategies and intervention techniques. To prepare initially, teachers within this program attend collaboration workshops. The district provides substitute teachers and reduced class size to facilitate and support the ongoing program.

**Goals:** The teacher collaboration teams (TCT) have an impact on the entire school population; all students benefit from the program including students who are at risk and above average. A national research project has selected the TCT program to participate in studying interventions and procedures that schools use to successfully accommodate students with mild disabilities in the regular education classroom.



**Program Contact:**

Dwayne Askew, Principal  
Wausau School District  
Riverview Elementary School  
4303 Troy Street  
Wausau, WI 54401  
(715) 675-3456

## Partnerships

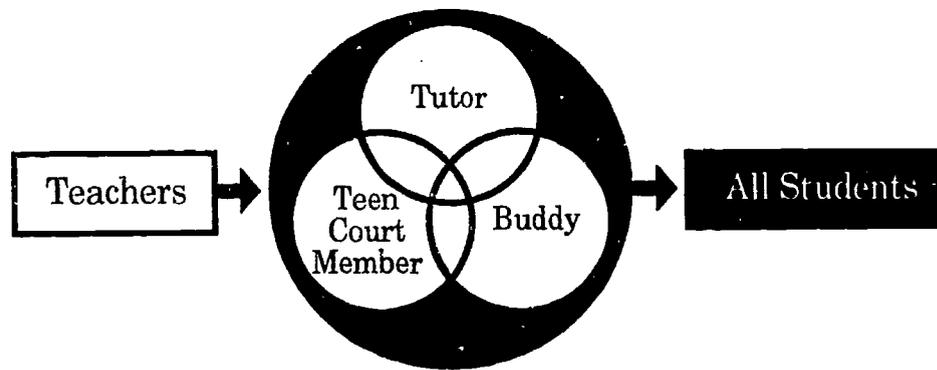
### *Peer Helpers*

**Grade Level:** Grades 8-9

**Description:** This program promotes same-age peers in three different situations. First, it identifies eighth and ninth grade students as helpers. Second, it trains them during a two-day period in the fall term. Third, it provides monthly additional training support throughout the school year. These helpers come to be a tutor, buddy, teen court member, or a combination of the three. A tutor works with students who need additional academic support during a common study time. A buddy might connect with a seventh-grade student and meet weekly to discuss concerns, play board games, and generally function as a role model for the younger student. The teen court meets weekly with students experiencing a suspension. They share their concerns about the choices the suspended students have made and offer reassurance that positive changes can take place.

**Roles:** All educators in the junior high participate in the training of these students and in making buddy and tutor/tutee arrangements.

**Goals:** The goals of this project are to improve student self-esteem, to develop peer support systems among students, to help students identify essential characteristics of being role models, to increase student academic success, and to improve student attitudes toward learning.



**Program Contact:**

D.C. Everest Junior High School  
1000 Machmueller Street  
Schofield, WI 54476  
(715) 359-0511

## Partnerships

### *Multiple Partnerships*

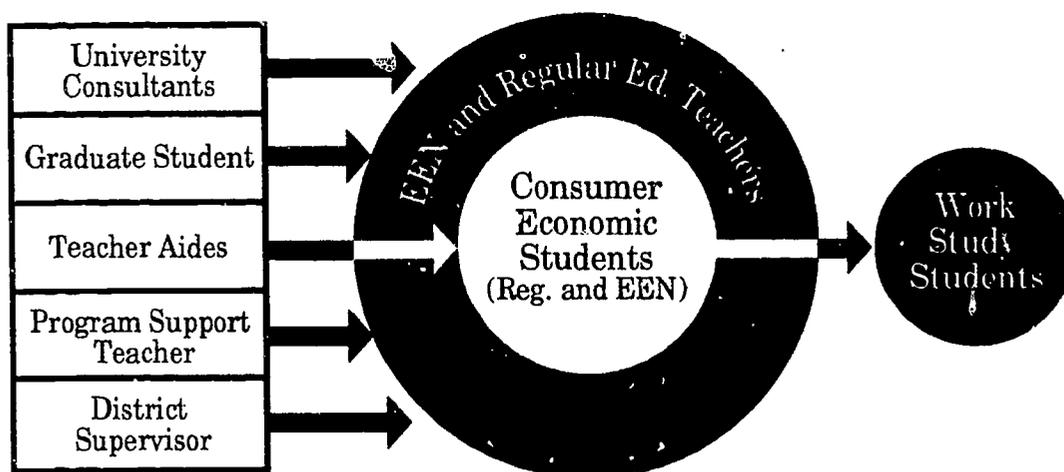
**Grade Level:** High school

**Description:** This secondary program is a result of the Ventures in Better Schooling Summer Institute at the University of Wisconsin-Whitewater and of a discretionary grant awarded to solve a high failure rate in consumer economics. Workstudy students with learning disabilities work as office assistants at one high school and at the district's central office. They acquire secretarial experience and model the needs and strengths of students with learning disabilities to other teachers and staff in the school district.

Educators use cooperative learning extensively. Trained teacher aides assist with such strategies as note-taking, review, taped materials, and computer assistance. The program maintains a resource materials center to assist absent students or students in need of review.

**Roles:** A team of economics teachers, exceptional education teachers, and administrators use co-teaching and collaboration to ensure success in consumer economics, as well as provide strong transitional experiences. Each semester, three sections of the course are co-taught by three regular education teachers paired with three exceptional education teachers. The teachers have weekly joint-planning sessions. Initially, Ventures in Better Schooling prepared the teachers. Now, on-site consultative time with University of Wisconsin-Milwaukee and Green Bay consultants provide staff development and support. Funds are also available for workshops and professional materials. The district supervisor, a program support teacher, and a University of Wisconsin-Green Bay graduate student fill the roles of major project facilitators.

**Goals:** No students with learning disabilities have failed consumer economics while in the program, and a dramatically lower failure incidence exists for all students. Feedback from regular education students has been especially positive regarding the cooperative learning and resource materials center. Plans to expand the program to other departments and secondary schools in the district further indicate the program's success.



**Program Contact:**

Sheilah Cradler, Special Education Supervisor/Learning Disabled  
Green Bay Area Public School District  
200 South Broadway  
Green Bay, WI 54303  
(414) 448-2078

## Other Programs and Models

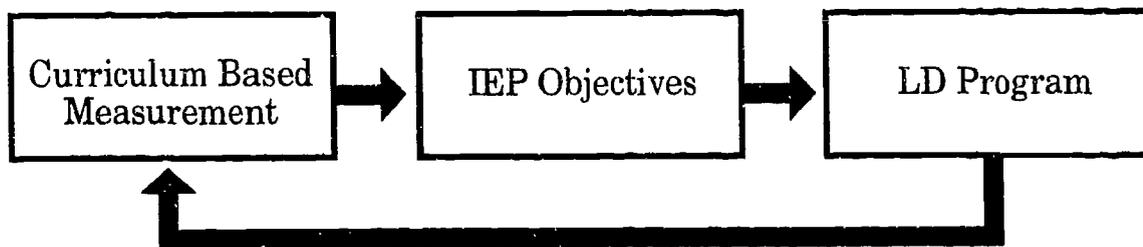
### Curriculum Based Measurement

**Grade Level:** K-12

**Description:** The Milwaukee public schools operate multiple examples of programming variations for students with learning disabilities, including integrative, inclusive, co-taught, and collaborative models. These models use a skill-, subject-, and strategy-focus. Many of the students in these programs are monitored through Curriculum Based Measurement (CBM). This form of measurement is more appropriate for exceptional education students because educators develop the necessary specific objectives and monitor their students with exceptional closeness. CBM evaluates a student's reading and written expression three times each school year. Some programs chart mathematics similarly. One document from the Milwaukee Public Schools is especially informative: *One At A Time, Together!* (1990)

**Roles:** To prepare, the teachers and administrators receive training and materials in Curriculum Based Measurement. Consulting teachers provide assistance to these programs within their service delivery areas.

**Goals:** The results of these assessments support integrative, inclusive, co-taught, and collaborative models over resource, "pull-out," or self-contained integrated programs, due in part to the former's flexibility.



**Program Contact:**  
Program Administrator  
Learning Disabilities and Hearing Impaired  
Department of Exceptional Education and Supportive Services  
Milwaukee Public Schools  
5225 West Vliet Street  
Milwaukee, WI 54208  
(414) 475-8745

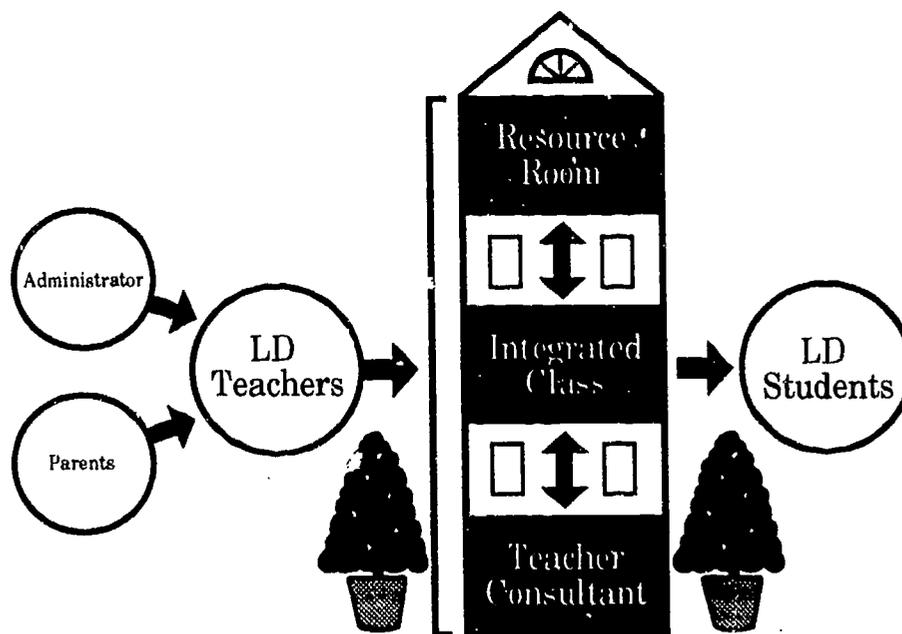
## The CONDO

**Grade Level:** Middle school

**Description:** A unique blend of distinct program components appears in this middle school learning disabilities program, Central's Organized Network for Developing Opportunities (CONDO). The program includes a resource room for homework assistance, organizational help, and lesson review.

**Roles:** There is classroom collaboration between the regular and exceptional education teachers in which the exceptional education teachers answer student questions, prompt students, teach, or reteach. The program includes a consultation component where the LD teachers assist with lesson adaptations, remedial strategies, and general planning. The administrator is an integral part of the CONDO team, having major responsibilities in providing resources to students and teachers and staff development. Parental communication is also an important component of the program and parents receive regular letters and reports. Included in the letters home are learning disabilities evaluation progress reports that rate areas such as homework completion and classroom attitude. Ongoing grades and missing assignments are also noted. Parents have expressed an appreciation for the close, structured communication system.

**Goals:** Most students move through the three levels of resource room, classroom experience, and consultation as they grow in independence during their three years in middle school. Staff report several advantages of this three-leveled program for students with learning disabilities. The students grow in confidence, independence, and social integration. They also seem to benefit from the cognitively richer environment. The program model was developed with the initiation of modifications and collaboration by regular educators.



**Program Contact:**

Bob Kieckhefer, Integration Coordinator  
Central Middle School  
Hartford Public Schools J1  
Hartford, WI 53027  
(414) 673-8040

## *Other States' Efforts*

Other states are also in the forefront of this shift in programs and models for students with LD. Most focus on the concept of least restrictive environment (LRE) embodied in special or exceptional education law. See appendix A for more information about contacting the educational agencies or organizations in the states whose programs are described below.

### **Idaho**

The Collaborative School Project in Idaho is piloting models that have a cohesive approach, in order to serve all low achieving students. Chapter I, migrant, ESL/bilingual education and special education divisions of the state have made a joint effort in this project. Numerous elementary and secondary schools are piloting this model. The requisite staff training includes workshops in co-teaching, peer-coaching, and collaborative models as well as providing on-site technical assistance. Additionally, consultants from Boise State University assist and evaluate the project. Results of the project are currently available.

### **Minnesota**

Minnesota's Unique Learner Needs section developed a handbook of recommended practices generated by regular and special education teachers, parents, advocates, administrators, university faculty, and the State Department of Education staff. The document centers on implementation of the least restrictive environment concept and includes philosophy statements, questions, recommended practices, "red flags," and example programs. Pre-referral, parent involvement, and staff training are included. Program delivery is learner- and IEP-driven and not based on existing programs.

### **New Hampshire**

Schools are also experimenting with alternative assessment programs and models. Districts in New Hampshire, for example, assess students through literacy profiles. These profiles evaluate students through observable behaviors in reading and writing, which are descriptive of the student's abilities. Consequently, this type of assessment distances itself from the more common weakness, treatment, or

reductionistic types and reflects a philosophical shift in exceptional education.

### **Oklahoma**

The Oklahoma Secondary Learning Disabilities Project provides a model for diagnostic-prescriptive teaching of grades 7 to 12 that emphasizes a team approach for the diagnostic teacher, learning disabilities teacher, regular educators, and related administrators. The program has four major components: diagnostic-prescriptive services, resource room services, a specifically designed multi-media library, and an affective program. Computer-assisted instruction is a major tool within the components. The program has received national validation, and it demonstrates academic and self-esteem increases of significance. While some component parts are reminiscent of "treatment" programs of the past, mainstream and skills application are components as well.

### **Pennsylvania**

Information from Project MELD (Mainstreamed Experiences for the Learning Disabled), which is associated with the University of Pittsburgh, suggests a schoolwide school improvement effort that will help students with LD be successful in regular education. The goal of MELD is to fully integrate elementary learning disabled students into regular education classrooms with supplemental assistance and support from exceptional education teachers.

In planning for the project, teachers and administrators developed rules for returning the students to the regular education classroom and received in-service training in alternative strategies to teach reading. They also developed Curriculum Based Measurement (CBM) in reading. During the implementation year, the exceptional education teachers spent their time co-teaching in the regular education classroom, conferencing with regular education teachers, providing consultation and support, and reviewing CBM data. Educators gathered mathematics, reading, behavioral, and attendance data on the students.

The data have suggested the necessary intervention and training of regular education teachers and exceptional education teachers for their new roles. The data have also suggested that students will not make progress if teachers continue with "business as usual," that is, in-

struction without interventions and modifications. So far the authors of the project stress that students should find more opportunities for productive academic tasks in the mainstream, experience less stigma, benefit socially, and respond to higher expectations for academics and behavior. Data on MELD suggest the need for additional study.

## Texas

With field testing in almost all of the fifty states, Collaborative Consultation—a highly organized teacher curriculum—has developed and grown in popularity through researchers associated with the University of Texas at Austin. Its student functions are preventive, remedial, and instructional. Its creators designed the program for regular and exceptional educators in order to train them and to expand their communication and problem-solving skills. Its training components include lectures, manuals, role-playing, and videotapes.

## Conclusion

Teachers of students with learning disabilities should feel challenged by the changes in programs and models. These changes require rethinking and flexibility, but they acknowledge the real needs of their students and recognize the growing knowledge regarding these unique learners.

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- One at a Time, Together!* Milwaukee, WI: Milwaukee Public Schools, 1990.
- Taylor, D. *Finding Another Way*. Alternative Assessment in Special Education presentation for Wisconsin Personnel Development Consortium/Teacher Education Division/Council for Exceptional Children 13 March 1992. Hyatt Regency, Milwaukee, WI.

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**LD Model Program Information**

Please share information about your model program and mail it to LD Consultant, Wisconsin Department of Public Instruction, 125 South Webster Street, P.O. Box 7841, Madison, WI 53707-7841.

Contact Person: \_\_\_\_\_

Address: \_\_\_\_\_

Business Telephone: \_\_\_\_\_

School District: \_\_\_\_\_

1. Program Title: \_\_\_\_\_

2. What are the specific goals/outcomes of the model program?

3. Describe the specific activities and/or program.

4. Describe how the students with learning disabilities gain greater independence, productivity, or success in school and community life as a result of this model program.

5. What resources are needed to implement this model program? Resources include people, equipment, training, special funding. Include cost if applicable.

6. How long has this program been in existence? What data exists that demonstrates the effectiveness of this program?

# Creating a Collaborative School

# 9

The models, programs, theories, approaches, and all information presented in the first eight chapters *depend* on collaboration to turn them into successful learning experiences for students. This final chapter provides information about creating a collaborative school. Readers will note a change in format for this final text section. The author chose a question-and-answer design for the material so educators could refer to it more easily. Both detailed and short responses appear in answer to the questions in bold.

## What Does the Term *Collaboration* Mean?

The term *collaboration* can be defined as a systematic, interactive process that “. . . enables people with diverse expertise to generate creative solutions to mutually defined problems.” (Idol, Paolucci-Whitcomb, and Nevin, 1986)

✓ a systematic, interactive process

There are several key concepts for educators to consider when they build collaborative relationships within schools. According to the definition above, people who engage in coordinated and efficient joint actions and who share in the risks and success of the venture are part of a collaborative effort. These ventures are systematic and coordinated efforts that bring together two or more people with diverse expertise for the mutual goal of engaging in effective and efficient problem solving.

✓ coordinated efforts  
✓ shared risk-taking  
✓ effective and efficient problem solving

Although it is important for individuals to develop collaborative ventures, there is more to building a collaborative school than the periodic use of collaborative or team practices. Schools are collaborative when they do the following: value collaboration as an effective strategy for solving problems, promote the creation of an environment that encourages a wide variety of collaborative activities (social and academic) within the school and between the school and local community, and provide all team members with the opportunity to develop the skills necessary to work together effectively.

✓ problem-solving strategy  
✓ environment for interactions  
✓ staff development

## What Are Some of the Basic Principles of Collaboration?

- ✓ problem solving  
The primary goal of all collaborative efforts is to help individuals solve problems more effectively and efficiently by teamwork. The concept of collaboration is based on a variety of general assertions or principles. The following statements reflect these principles.
- ✓ a common goal  
First and foremost is the principle that people who collaborate, sharing a common goal, will accomplish more than individuals working independently towards the same goal. This principle is considered to be a well-established principle of social psychology.
- ✓ a scientific art  
Second, there is no single model of effective collaboration. Collaboration is a complex and variable process that centers around problem solving. Because problem solving entails constantly varying factors—people, environments, and resources—the process is a scientific art that demands a wide variety of skills for successful implementation.
- ✓ varied size  
✓ mutual respect  
Third, collaborative activities can involve just two people, a team within in a school, an entire school staff, an entire school district, or the school community. Regardless of size, collaborative activities require *all* involved parties to relate to one another in constructive new ways. Mutual respect and cooperation must prevail.
- ✓ diverse expertise  
Finally, while all members of a collaborative team must have some level of expertise to share, not all team members have the same competencies or expertise. The diversity of expertise will add to the value of the collaborative team.

## Why Should Educators Work Collaboratively?

- ✓ national mandates  
A wide variety of national mandates have contributed to the call for increasing collaborative practices within schools. Although the following reasons for collaboration reflect different perspectives, each one has the goal of developing collaborative efforts to increase effective education for all students.
- ✓ IDEA  
✓ LRE  
The Individuals with Disabilities Education Act (IDEA) is federal legislation that provides for free and appropriate education for children and youth within the least restrictive environment (LRE). IDEA has significantly increased the identification of children for special services.
- ✓ current integration practices  
Current statistics reveal that up to 75 percent of the students identified as handicapped or disabled receive their education within the LRE of the regular classroom setting. Despite this placement within general education settings, research indicates that regular classroom teachers often are inadequately prepared to meet the diverse educational and behavioral needs of these students.
- ✓ REI  
The Regular Education Initiative (REI) is a response, outlined in a speech by Madeline Will, former Assistant Secretary for the Office of

Special Education and Rehabilitative Services, U.S. Department of Education, to the inadequate progress of students within self-contained, special education settings and during their transitions from these settings to regular education classrooms. This initiative calls for the unification of the current dual education system of special and regular education. The supporters of this initiative believe that such a unification will provide the most effective services to *all* students.

✓ unification of regular and special education

Establishing this unified system requires the development of partnerships among the individuals involved in regular and special education programming. In collaborative partnerships, educators share equally in the success of all students, because educators equally share in the responsibility. (Will, 1986)

✓ partnerships  
✓ shared responsibility

Statistics from the National Joint Committee on Learning Disabilities (NJCLD) indicate that more than 90 percent of students identified as having a learning disability receive at least a part of their education within the regular classroom. In addition, this committee addresses the increasing number of students with diverse educational needs (cultural, linguistic, and others) who do not qualify for special education services. The major recommendation of the NJCLD is for professionals, parents, and students to establish collaborative relationships and share the responsibility of educating all children.

✓ growing student diversity

The Teachers' Rights Committee of the National Education Association identified issues that teachers in regular education face when working to comply with the federal legislation, IDEA, that mandates LRE. One major problem is the lack of preparation for regular education teachers to educate children with exceptional educational needs. Recommendations from this committee include shared planning among professionals and adequate staff development.

✓ lack of teacher preparation

### **What Evidence Shows That Collaboration Is an Effective Approach?**

The proliferation of mainstreaming activities in recent years has spawned renewed interest in consultation and related collaborative activities. Collaboration and consultation have a rich history in the service professions. As more mental health services moved into school settings, the popularity of consultation and collaboration flourished.

With the significant increase in services for students with disabilities in the 1960s and 1970s, special education professionals began to examine the feasibility of consultation as a viable model for service delivery. Although the literature on consultation and collaboration presents a broad base of support for these activities, it is important to note that there is not a great deal of empirical research to guide collaborative practices.

✓ viable service delivery models  
✓ broad support

Much of the existing research on collaboration activities is very supportive. Researchers claim that large numbers of students are adequately

✓ facilitated integration

- ✓ reduced inappropriate referrals
- ✓ improved instruction
- ✓ reduced mislabeling

served via these models. Collaboration activities have resulted in the following benefits: facilitation of mainstreaming, reduction of inappropriate referrals to special education, improved instruction of all students in regular classrooms, and reduced mislabeling of students.

### **What Kinds of Change Does Collaboration Incur?**

- ✓ necessitates an understanding of the change process

Moving toward collaboration requires some degree of individual and organizational change. Individual change must occur before organizational change happens. When individuals involved in collaborative activities understand the process of change, the collaboration tends to become more effective more quickly.

- ✓ involves risk-taking

When presented with an outline for change, many individuals will first demand more information. At this starting point, people may not feel comfortable with the amount of given information to undertake a major change. People must be willing to take risks and perceive their risk-taking as positive. An environment that accepts, supports, and cultivates risk allows people to move forward.

- ✓ affects the individual

The next stage in the change process is egocentric. At this stage, individuals ask, "How will this change affect me personally?" They must perceive change as growth in order to support it throughout its various stages. If the proposed change appears only temporary, it will lack the appropriate support, and people may take the attitude that "this too shall pass."

- ✓ affects the system

After looking at the change from a personal viewpoint, people tend to shift to the mechanics and logistics of the change within the organization. Individuals may raise questions about the availability of the following: appropriate planning time, adequate materials, and management of unfamiliar processes. This is the time when change saboteurs may emerge and try to convince others that the "old way" was better, faster, or more sensible.

- ✓ affects students

Only when people have moved beyond these personal and organizational stages can they concern themselves with the ultimate consequences of the change: the impact on students. At this point, collaboration in its most effective form will thrive.

Interestingly, when collaboration plays an ongoing role in the organizational culture, individuals usually go through the stages of change significantly faster. The ability of an organization to undergo change quickly is the hallmark of organizational health in this era of continual change. (Senge, 1990)

- ✓ shares power

As groups move toward collaboration, specific power issues emerge and need to be addressed. Individuals must identify, address, and resolve these issues as part of the change process. Because collaboration moves a group of people from centralized power to decentralized power, the

aggressive leaders and the passive followers will be sharing power. It is likely that neither will find this comfortable at first.

The power and authority to coerce must be redirected toward the power and authority to lead others toward growth. These are role changes that may require a whole new set of skills.

- ✓ requires new skills
- ✓ moves from coercion to leadership

### **What Are Some of the Common Misconceptions Regarding Collaboration?**

Collaboration as a concept and process is not new to educators. They tend to use the word interchangeably with cooperation, teaming, and other terms that describe people working together. It is important to note however, that people who work together may not actually collaborate. The attributes of interaction of two or more people, representation of diverse expertise, generation of solutions to mutually defined problems, and the utilization of consensus processes are at the heart of collaboration.

- ✓ All groups are collaborative.

It is also important to consider group values and behaviors that can distort the understanding of collaboration. Compliance has prevailed for so long in many organizations that it is hard to recognize the difference between compliance and commitment as they relate to collaboration. Educators should consider the following descriptions of behavior levels that relate to commitment and compliance.

- ✓ Compliance is the same as commitment.

**Commitment.** Individuals in the group want something to happen, will make it happen, and will create the necessary structure to make it happen.

**Enrollment.** Individuals in the group want something to happen and will do anything within the perceived present structure to achieve it.

**Genuine compliance.** The group sees the benefits of something, fulfills its obligation, and offers more, following the instructions exactly to conform to the wishes of the organization.

**Formal compliance.** The group on the whole sees the benefits of something, fulfills its obligation, but does no more than that.

**Grudging compliance.** The group does not see the benefits of something but does not want to "buck the system." Members speak unofficially against the proposals.

**Noncompliance.** The group does not see benefits and will not do what is expected.

**Apathy.** The group is neither for nor against whatever is considered. It shows no interest and no energy. (Senge, 1990)

When working in a collaborative group, members *must* know of the skills and processes that will ensure commitment or consensual support. Compliance is not enough.

- ✓ Compliance is sufficient.

✓ Dependency promotes collaboration.

Group members must also guard against processes that lead to dependency rather than to group autonomy. Groups that are formulated by top-down decree, that develop processes or programs to please those with greater power in the organization, or that use manipulation to control people or events are not collaborative. An example of these potential dangers is found in the comment, "I was talking to one of the board members who thinks this is a good idea." The comment reflects behaviors or attitudes that nurture and reinforce dependency and compliance because it refers to a source outside of the group for approval.

✓ External power promotes collaboration.

Group autonomy develops when the group initially forms because the individuals believe in their goals and actions. In these situations, the group's authority is internal rather than external. "I believe this is a good idea" is a comment that reflects group autonomy because it seeks approval primarily from within the group. When the processes and goals truly mean something to group members, each can contribute equally, and generate a sense of integrity by being true to their beliefs. Comments such as, "We're doing this to please the boss" have little relevance in a group that believes in its own worth and abilities.

✓ Manipulation promotes collaboration.

Freed from manipulation, the actions of the group become authentic. Members communicate exactly what they mean, share as much information as possible, use language that describes reality, and avoid repositioning for the sake of acceptance. (Block, 1990)

✓ Autonomy does not support collaboration.

Although autonomy may sound like the opposite of collaboration, group autonomy reflects a self-actualized collaborative group that will function in an effective way.

### **What Are the Essential Elements for Effective Collaboration?**

After reviewing a wide variety of models that have a collaborative emphasis, the author of this guide found certain elements to be critical for the successful implementation and maintenance of collaboration. Figure 33, "A Model for Building Effective Collaboration," portrays these critical elements and shows how they function together to support the common goal, or hub, of collaboration.

✓ clear and unified goals  
✓ commitment to goals

Individuals must share at least one common goal and all goals must be clearly defined. Also, group members should identify their individual goals. These individual goals must be compatible with the unified goal. The establishment of individual goals increases the commitment of participants and the probability that they will meet their unified goals.

✓ parity  
✓ shared status  
✓ equal access

All members of a collaborative team must be empowered with equal status within the team. Even if the relationship outside of the team is not equal—for example, between a teacher and administrator—inside the team there must be parity. Parity denotes that all members have equal access to available resources, including staff development activities and time to meet. Parity also indicates that all members have equal

### A Model for Building Effective Collaboration



access to participate in the joint venture. Shared responsibility occurs when all members feel they have something of value to contribute to the process.

All participants must value the collaborative process as the most effective way to solve problems and address a common goal. All participants must choose freely to involve themselves in this process, because coercion will not result in true collaboration.

✓ a common value

In order for collaborative efforts to succeed, all members must trust their colleagues. Personal or hidden agendas only serve to undermine the effectiveness of the process. All members must be committed to maintaining confidentiality and professional behaviors.

✓ mutual trust

All participants must arrive with or have the opportunity to develop effective interpersonal skills. These include non-judgmental, effective

✓ effective interpersonal skills

listening skills, such as paraphrasing. Such skills are the basic tools for effective decision making, problem solving, and conflict resolution.

✓ quality leadership

Building administration must act as a positive role model and operate as an effective facilitator of the collaborative process. District administration should support collaboration both explicitly and implicitly.

✓ appropriate incentives

In order to sustain effective collaborative efforts, it is imperative that the administration provide adequate and varied incentives for participants. Professional recognition, planning time, and monetary incentives facilitate the collaborative processes.

### **What Are Some Examples of Collaborative Models?**

*Intrasystem* collaborative teams exist within a building and *intersystem* teams exist between a school and an internal or external agency. The following examples describe common collaborative intrasystem team configurations. Intrasystem teams can be divided into those that provide indirect support and those that provide direct services. Although details vary from program to program, the models represent collaboration in educational settings. Descriptions of specific collaborative projects appear in chapter 8, "Program Models."

✓ The Teacher Assistance Team

An intrasystem technique for providing indirect support to classroom teachers with day-to-day problems is called the Teacher Assistance Team. The team typically includes elected or selected teachers and the teacher requesting assistance. Other specialists, the parents, and the student may be involved.

The team is designed to provide prompt support to the teacher by using a structured process to conceptualize the problem, brainstorm possible solutions, and plan interventions. Follow-up activities are part of this process and include evaluating a student's progress or planning further interventions.

The team develops goals to help teachers meet the needs of all students, to support teachers with special needs students in their classes, and to provide an efficient screening for further assessment or services.

This team serves a wide variety of functions, and provides the following: efficient and effective assistance to both students and staff, a systematic process for screening, the identification and remediation of instructional and behavioral concerns, reduction in the number of inappropriate special education referrals, and more productive communication between school personnel and other agencies.

✓ Cooperative Teaching

Whether dealing with interdisciplinary teams of students at the middle or secondary levels, multi-age units at the elementary, or integrated regular and special education students in a classroom, team teaching or cooperative teaching involves direct services to students in a collaborative manner.

Working together to provide student success is a powerful use of collaboration. Cooperative teaching presupposes that, to teachers, the students are "ours" as opposed to "mine" and "yours." The team functions as a holistic unit rather than as separate individuals who take turns teaching. Accountability for planning and delivering instruction, supporting one another, and assessing student progress belongs to the team.

The purpose of a school improvement team, which is a school-based problem-solving group, is to provide a variety of support services directly to teachers and indirectly to students. These teams engage in short-term consultation and continuous support, while securing information, resources, or training. This team may assess and determine building-level needs for staff development, provide the means by which those needs are met, and facilitate and expedite student assessment and placement. Multidisciplinary assessment teams are an example of a collaborative, school-based team. Other examples include Peer Coaching (Showers, 1985) and Peer Collaboration (Pugach and Johnson, 1989). Other models being introduced in some schools are the collaborative study group, which operates like a reading discussion group, and mentoring programs.

✓ School Improvement Teams

There are also a variety of intersystem teams that include representatives from schools and a variety of community agencies. The state of Wisconsin has established intersystem teams to address a wide variety of issues and include programs such as Family and Schools Together (FAST); Job Training Partnership Act (JTPA); School-Business Partnerships; The School Inclusion Project, the Wisconsin ADD Project, the Wisconsin Transition Project, and Birth to 2 Programs.

### **How Do Educators Begin to Implement the Essential Elements?**

Schools can initiate collaboration in two basic ways: the development of a team to meet an ongoing function, such as a Teacher Assistance team; or an ad hoc collaboration team that functions for a specific task or project, such as a school improvement team.

✓ determine purpose

In either case, two areas need attention as the team gets started: learning to work together as a team and developing ways to get the work done. More often than not these two areas will develop at the same time. In order to understand the importance of each, they will be treated separately in the following descriptions.

✓ work together  
✓ clarify process

Learning to work together requires acknowledgment of the undercurrents of team dynamics. If left unattended, these undercurrents can develop into barriers to collaboration. Team members often do not speak about their own group dynamics, but they are common to every group.

✓ acknowledge undercurrents

It is normal for each individual to wonder how she or he will fit into the team, how the relationships between and among team members will

✓ clarify individual contributions

affect the work, and how the individuals will maintain their identities within the group or organization.

✓ practice effective conflict resolution

When teams first begin working, there is a tendency for members to be very polite, to make sure no one "ruffles" anyone else's feathers. This often occurs to the point of refraining from sharing dissenting viewpoints. Members often "go along" with the group to avoid confrontation. When individuals engage in behaviors that reflect a "pseudo-community," it is a natural first phase. Teams must move beyond this stage, however, to become truly collaborative.

✓ establish community of collaborators

In order to move from this initial stage toward establishing true collaboration, some dissention must take place. This is often the most difficult stage for the team. Members may realize the task is different or more complex than they originally believed and they may become testy, blameful, or overzealous. Many members may become impatient about the lack of progress and want to forge ahead with or without group approval. Arguments, defensiveness, polarization, and concern may be present.

✓ facilitate interactions

It is through these processes, when combined with knowledgeable facilitation, that individuals develop an understanding of one another, an acceptance of one another, and a realization that mutual support is necessary to move forward. It is only through this "storming" that the needed trust develops. (Tuckman, 1955)

✓ understand process of change  
✓ overcome discomfort

There are many sources available that describe team building activities that groups can use to help speed the process. Perhaps the most important factor contributing to the success of team building is the team members' understanding that the process of implementing change occurs in stages. Team members must understand these stages and work to overcome any discomfort they may feel during the initial stages of confrontation and storming.

During the second stage, the stage of actually getting the work done, developing or refining the protocols of the team's function takes on new meaning. The attention that the team gives to this task is also a good process or way to take a group from the frustration of moving beyond "pseudo-community" and its contingent storming to true collaboration.

Given that the team has clearly defined its goals, it still must identify the way the team will conduct and complete its business. The rest of the questions and answers provide a guideline for items the team needs to consider. These address the key concepts for doing business. (Scholtes, 1988)

### **What Are Basic Meeting Ground Rules?**

✓ attendance  
✓ promptness

The team must determine the importance, priority, and nature of meetings. If meetings are the main communication tool of the team, members must have a clear understanding of the ground rules and procedures for

them. The team should determine an attendance policy and members should know any procedures to follow if absent. For example, the team may want members who will be absent to inform the team leader beforehand, if possible. Individuals also need to articulate how strongly they feel about starting and ending the meeting on time and the use of breaks. The team must establish a procedure for notifying members of the place and time of meetings as well as decide who will be responsible for scheduling the meetings, reserving the location, and other "house-keeping" chores. These tasks may include the keeping of minutes, agendas, and records, so teams also need to discuss the issues of keeping information and having access to it. The most crucial ground rule to establish, however, is that which deals with participation. A true collaborative team commits itself to ensuring that all members speak freely and listen attentively. This attribute is key to all elements of effective collaboration, but especially the identification of decision-making procedures.

- ✓ establishment of meeting place and time
- ✓ participation
- ✓ breaks
- ✓ rotation of routine chores
- ✓ keeping agendas, minutes, and records

### **How Does the Team Determine its Support Services?**

Access to word processing, copying equipment, and supplies are support services that most teams will require at some time. Team members need to cultivate resource people who can serve as consultants if needed, and develop networks for other support services.

- ✓ clarify resources

### **How Does the Team Build Consensus?**

Consensus reflects the thinking of all group members in finding acceptable solutions. *Acceptable* may not denote a unanimous or a majority vote. It may not even represent every member's first priority. Acceptable solutions do indicate, however, that enough support exists within the group to make a decision at least for a trial time period. Consensus requires time, communication skills, creative thinking, and open-mindedness. The team will not reach every decision by consensus. Members should develop criteria that will help them decide ahead of time when consensus decisions are needed.

- ✓ build and practice team decision-making skills

### **What Are Some Tools or Techniques for Group Decision Making?**

Team members need to know a variety of processes, both formal and informal, that they can match to situations requiring effective and efficient consensus-building.

When a broad range of ideas is needed, groups should try brainstorming. This common technique has the entire group engaging in free-form thinking that quickly generates many ideas without criticism or judgment. Groups should exercise caution with this strategy because it is often misused. Groups sometimes forget that a rapid flow of ideas must be connected to a purpose or a goal, otherwise it loses meaning. It is a good idea to review guidelines that include goals before every brainstorming session. (Scholtes, 1988)

- ✓ brainstorming

- ✓ multi-voting

Multi-voting often follows a brainstorming session to identify the feasible number of immediate concerns for the team to address. The team uses a series of votes, and each vote cuts the list of concerns in half. This procedure quickly narrows a lengthy list of items, controls discussion, and eases difficulty. (Scholtes, 1988)
- ✓ nominal group technique

When faced with highly controversial issues or intense disagreement among members, a team that needs to develop priorities will appreciate the nominal group process. This non-interactive technique minimizes any individual's ability to monopolize the process. The leader conducts a "round robin" solicitation of ideas. The group votes for the best ideas and the leader selects the top vote-getters as the starting point for finding solutions. (Scholtes, 1988)
- ✓ top down flow chart

A top down flow chart develops a quick overview of how a project should unfold. The flow chart is a picture of the major steps in a process or project. By limiting space, the team forces itself to narrow its thinking and focus on only the essential steps of the process. (Scholtes, 1988)
- ✓ fist to five

Fist to five is a technique that quickly checks the group's feelings or commitment about an idea. Team members hold up their hands with the number of fingers that represent their opinion about an issue at that point in time, five fingers showing total agreement or commitment, down to a fist that shows no agreement or commitment. (Pfeiffer, et al., 1982)
- ✓ affinity diagram

The affinity diagram is helpful if the team is drowning in a large, chaotic volume of ideas and needs to identify broad issues or themes. This creative process requires the group to write every idea or item under discussion on a separate card. Together, members should sort those items that are naturally related into groups and identify the concept that ties each group together. Consensus is reached during the card sorting. (Brassard, 1989)
- ✓ interrelationship digraph

When the group needs to identify root causes, carefully focus its efforts on scarce resources, or better define large numbers of interrelated issues, the interrelationship digraph is extremely useful. The team collects all items generated in a discussion or brainstorming session, graphically maps out all the cause and effect connections among the items, and shows the impact of each. (Brassard, 1989)
- ✓ activity tree diagram

The activity tree diagram assists the team in breaking down broad objectives into specific details, including contingencies, options, and assignable tasks. This graphic process begins with the central goal written in the middle of a large sheet of paper or on a chalk or other erasable board. The team then maps out in increasing detail the full range of tasks that need to be accomplished to achieve the goal. (Brassard, 1989)

When the group must define and assign tasks within an organization, choose activities to test against other current activities, or prioritize present activities against new objectives, the matrix diagram works well. The matrix shows the connecting points between each set of new and current items, and the presence and strength of any relationship between them. (Brassard, 1989)

✓ matrix diagram

Priority matrices assist the team that cannot reach consensus because members disagree over the relative importance of decision-making criteria, have trouble narrowing key issues and actions, or are confused by strongly related options. The strategy encourages a team to select and weigh criteria and use that criteria to compare multiple options. (Brassard, 1989) Criteria are listed down one side of the matrix; the same criteria or other comparatives are listed across the top of the matrix. Team members then compare each criterion with each other or with the comparative listed, assigning numerical values to the weight each carries compared to the other. The sum of values assigned to each, if significantly different, indicates patterns of priorities and preferences.

✓ priority matrices

The process decision program chart is helpful to a team that faces a new or unique task, believes it will encounter problems regularly, or must keep to a tight time schedule to implement its work. This process requires the team to map out conceivable events and contingencies that could occur and plan appropriate countermeasures. (Brassard, 1989) This chart may look like a flow chart and will define options and results of various options.

✓ process decision program chart

When a team needs to plan the most appropriate schedule for the completion of any complex task and all its related subtasks, the activity network diagram is helpful. Teams determine total implementation time by reviewing key and minor tasks. This review leads the team to understand which tasks can occur simultaneously, which are contingent upon one another, and how each should be scheduled to meet a deadline or goal date. Teams using this diagram to measure allotments of time must also factor in possible delays if a person outside of the team and its schedule is responsible for a task. (Brassard, 1989)

✓ activity network diagram

Also called a "fishbone" diagram, this cause and effect technique allows the team to map out factors that will potentially affect a problem or desired outcome. It resembles a fishbone because a team draws a long horizontal line and writes the main goal upon it, then draws shorter lines, at about a 45-degree angle on both sides of the line for the individual factors. This tool is an effective way of examining processes and situations and can be very useful in facilitating team planning. (Scholtes, 1988)

✓ cause and effect diagram

Many other sources can provide other techniques or variations of these techniques for planning and decision-making. As teams develop multi-

ple tools for their collaborative work, it will become easier to match the process to the necessary work.

### **How Do Educators Maintain the Collaborative Process?**

✓ understand the cycles of progress

As the team progresses, there tends to be cycles of highs and lows. The pattern for every group is different and depends on the speed of its progress, the external resistance and encouragement to the team, and the success of the team as it works through problems.

✓ define team processes  
✓ address problems

The team should make time during its initial formation stages to develop a team dynamic and define a team approach. This will prevent many problems and provide the group with the processes for dealing with problems when they emerge. When these problems occur, and problems are a natural part of the collaborative process, they tend to be one of two types: group interaction problems or task problems.

The following suggestions from Scholtes' *The Team Handbook* provide guidance to groups in the two areas identified above. Team members may find it is necessary to revisit these strategies during the low points in the normal cycles of collaboration.

### **How Can a Group Effectively Work Through Interaction Problems?**

✓ anticipate problems

Groups should attempt to anticipate and prevent group problems whenever possible. Attention to potential problems at the beginning of a group formation will save time, prevent hassles, decrease frustration, and diminish animosity in the future.

✓ avoid placing blame

A group that thinks of each problem as a group problem will avoid placing blame on individuals. It is natural to want to blame someone for causing a problem, but most problems are attributable to a system and not an individual. The group needs to examine each problem in light of how the group encourages or allows problematic behavior to happen.

✓ look for alternatives

If groups look at alternative ways to approach a problem, they often find a different procedure or alternative process that eliminates or minimizes the problem.

### **How Does a Team Work Through Task Problems?**

✓ identify causes of problems

Teams should identify root causes of any problems related to their task. Two helpful tools are the fishbone (or cause and effect) chart, and the interrelationship digraph described earlier. If every team member knows the techniques of group processing, understands his or her individual role, and has the ability to match process and role to the task at hand, problems should be at a minimum.

Teams must check collected data at various points to determine if they are adequate and appropriate. Also, a group that identifies someone with specific skills to help it work through a task problem may experience smoother progress. Sometimes people removed from the problem have a different, more objective perspective that is helpful to the group.

- ✓ collect data
- ✓ utilize outside resources

By putting its task in a different format, a team can clarify its thinking and re-energize itself. Two approaches to consider are shown in figure 34, "The Top Down Flow Chart," and figure 35, "The Picture Book Format." (Scholtes, 1988)

- ✓ consider alternatives

## How Do Educators Evaluate the Processes and Products of Collaboration?

Evaluation is one of the most important and most difficult activities the team will undertake and should be an ongoing part of the collaboration. One of the biggest mistakes teams make is to wait until the work is over to evaluate it.

- ✓ conduct ongoing evaluation

The time to develop evaluation criteria for both the goals and the processes used to reach their goals is *before* the team begins its task or shortly after it identifies it. Developing evaluation criteria at the start of a project will give the team guidance and allow members to chart their progress.

- ✓ develop clear criteria

Measurable milestones or key checkpoints should be identified as well. Too often teams develop a goal around the finished product rather than charting a course toward the identified goal. Although goals can be amended as the group becomes more knowledgeable, the group's focus will remain constant if members measure their progress toward the goal on a continuous basis.

- ✓ establish measurable milestones

Evaluation should take place meeting by meeting. Team members should never end a meeting without monitoring the accomplished work and the way they accomplished it. People are often tired at the end of meetings and tend to "go through the hoops" without commitment to the evaluation process. Some team leaders have experimented with mid-meeting evaluations and have found them to work quite well.

- ✓ evaluate and monitor meetings

Evaluation tends to center on two areas that relate to the work of the team: the effectiveness of the team product and the efficiency of the team process. An effective evaluation of the product will also address the process, indicating whether the group is doing the right things or not.

- ✓ address team product and process

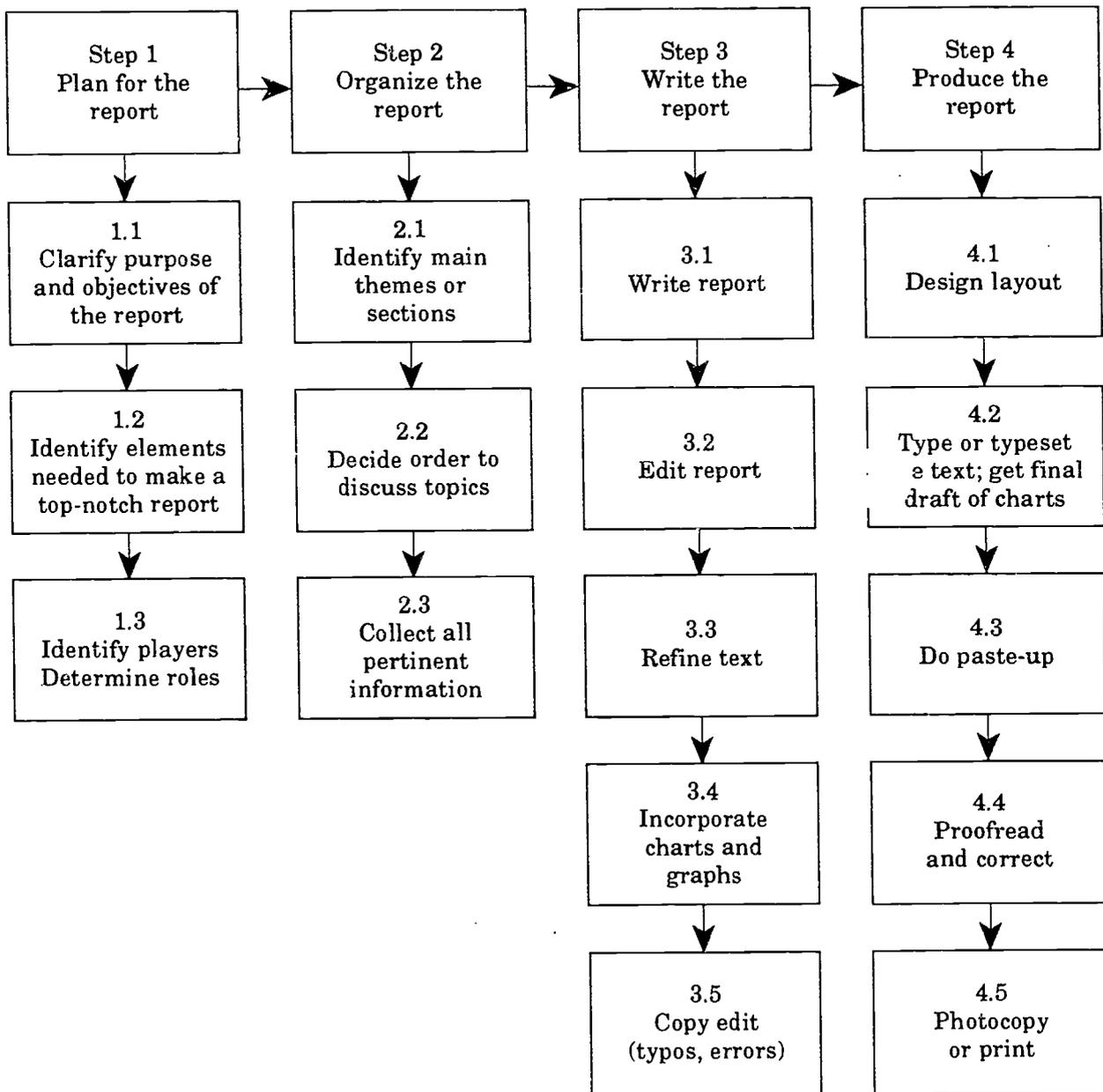
Relevant questions to ask include: Is the work-to-date congruent with the mission and goals? Is the database complete and accurate? Has the team identified key checkpoints to see if they meet the organization's needs? Has the team predicted outcomes, both positive and negative, for the results so far?

- ✓ ask relevant questions

Figure 34

## The Top Down Flow Chart

Directions: To construct a top down flow chart, first list the most basic steps in the process being studied or project being planned, ending up with no more than six or seven steps. List these steps across the top of a page or flip chart. Then below each one, list the major substeps (again, no more than six or seven). The example shows the top down flow chart developed for producing a team report.

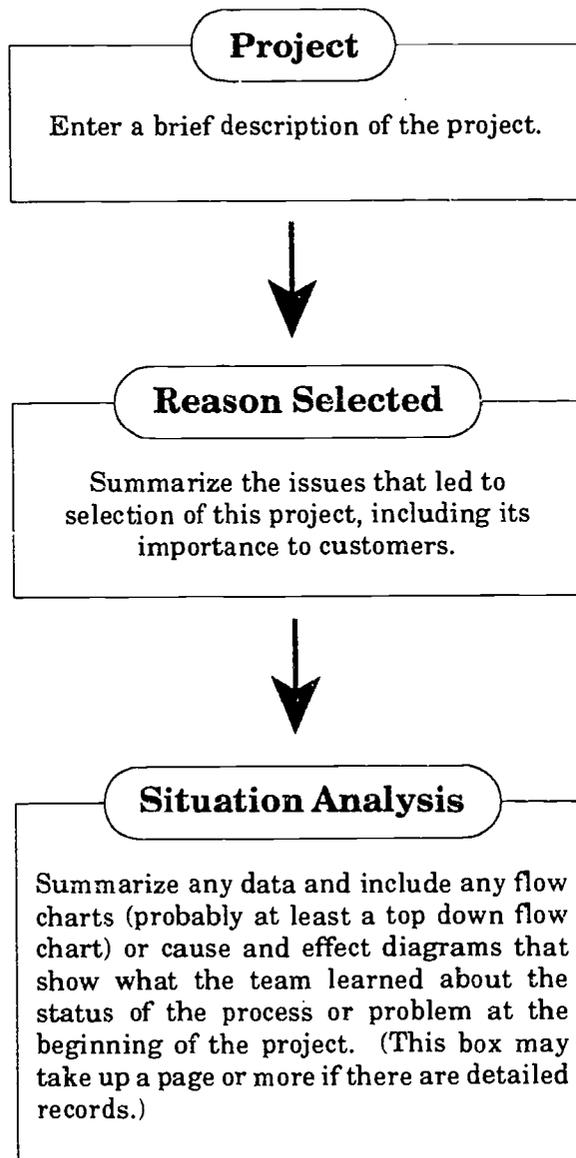


The Top Down Flow Chart is used by permission from Joiner Associates, Inc. It is included in *The Team Handbook* by Peter R. Schol

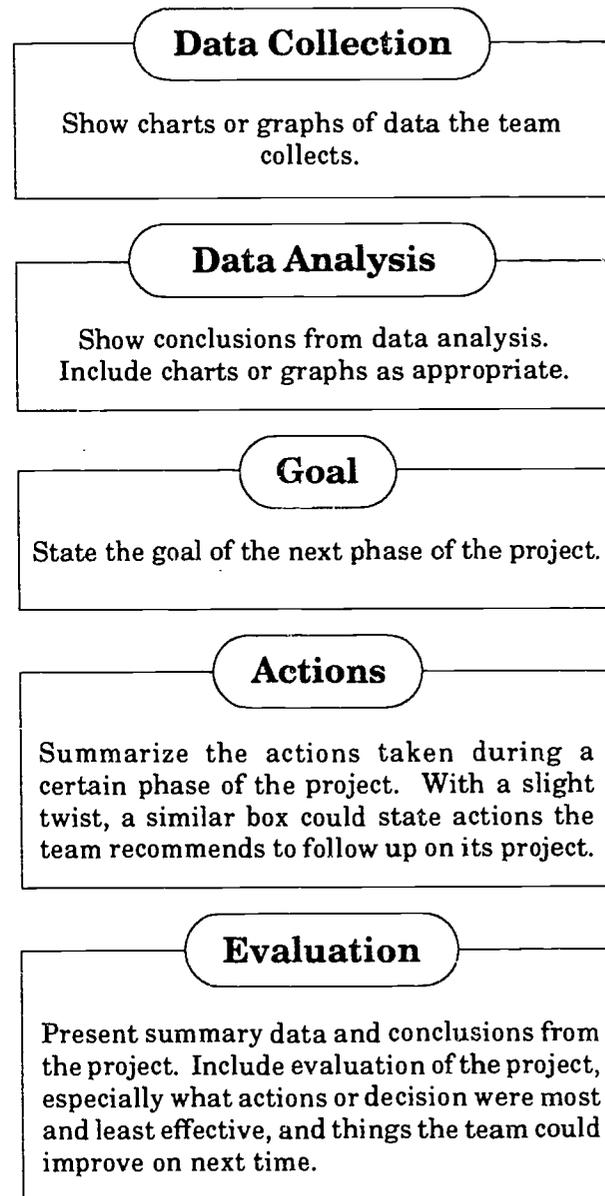
## The Picture Book Format

Directions: The picture book format displays the milestones in a project through a series of flow-chart-like entries. The project team leader can fill in the first two or three entries prior to the team's first meeting.

The first three segments of a Picture Book are standard:



Other segments will depend on the project. Some typical items included (not necessarily in this order) are:



The Picture Book Format is used by permission from Joiner Associates, Inc. It is included in *The Team Handbook* by Peter R. Scholtes.

✓ reduce obstacles

Efficiency or process evaluations address whether the group is doing the right things. Relevant questions include: Do the processes take the group where it wants to go? Are all group members participating? Does the group recognize systemic problems rather than blame individuals? What might be done differently? Are there places where meetings seem slow? How can the team eliminate obstacles?

✓ utilize systematic evaluation tools

The checkpoints that the group identifies in the initial planning stages can function as evaluation benchmarks. The Top Down Flow Chart, the Activity Network Diagram, the Process Decision Program Chart, the Activity Tree, and many other of the tools or techniques mentioned earlier include pertinent strategies that measure progress toward a goal. Teams that connect evaluation to their existing planning models find their results are more efficient and have greater validity.

✓ recognize need for continuous improvement

Final evaluations must also outline future modifications, measurements, and adjustments that will help the team adapt to changing situations. Constant improvements should occur, although there is no one, best, final answer. Beyond its judgmental role, the evaluation process often serves as the impetus for improvement, direction, and greater growth.

### **A Word of Caution**

✓ make data-based decisions

Before ending this section, a cautionary note is necessary. With the absence of a valid database to guide collaborative practices, school districts must carefully examine a variety of models associated with collaboration. In selecting a model or approach, districts must take care to address the applicability of the model and its elements to the specific school or school district. This issue is particularly relevant in regard to the availability of personnel to support a program's requirements.

✓ provide adequate training for team members  
✓ evaluate student success

In addition, districts must be willing to provide adequate training for all educators involved in collaborative relationships. Finally, districts must be willing to systematically evaluate the effectiveness of their collaborative activities in regard to student success.

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- A. *Resources*
- B. *Eligibility Criteria for Learning Disabilities*
- C. *Multidisciplinary Team Process*
- D. *Individualized Education Program*
- E. *Preventing Inappropriate Referrals of Language Minority Students to Special Education*
- F. *Exceptional Education Information Update—Bulletin No. 93.1*
- F-1. *IDEA Rules, Corrections, and Appendixes (Interpretations) Impacting Transition Services to Students With Disabilities (Published September 29 and October 27, 1992)*
- G. *Sample Learning Style and Strategies Questionnaire*
- H. *Sharing Resources*

## Resources

The following resource listing is not exhaustive. Certainly other materials exist beyond this listing that may effectively improve the learning of students with LD. Materials should always be carefully evaluated for gender, racial, or ethnic stereotyping because these issues affect the way students think and react.

Readers should note that some of these materials may no longer be in print, but may still be useful if conveniently available. Currently, most of these materials are available at the TIMES Center, which is the Inservice and Materials Exchange System center of the Milwaukee Public Schools Department of Exceptional Education and Supportive Services. The TIMES Center maintains an instructional materials exchange system where professionals and parents of exceptional education students can borrow materials on a loan basis.

This appendix is divided into the subject areas of reading, mathematics, language and spelling, social and emotional behavior, and vocational education. Before this listing by subject, however, is an overall alphabetized list of the various publishers, distributors, and companies that produce materials helpful to educators and parents. There may be information in the alphabetized listing that is not part of the entry by subject. Only publishers, distributors, and companies for which the author could locate current information are included in the overall, alphabetized list. This list also has the abbreviations or acronyms used for these groups throughout this appendix.

### Overview

**American Guidance Service (AGS)**  
4201 Woodland Rd.  
P.O. Box 99  
Circle Pines, MN 55014-1796  
800-328-2560

**Audiotronics Corp. and Instructional Dynamics Inc.**  
P.O. Box 3997  
North Hollywood, CA 91609

**Barnell Loft, Ltd.**  
958 Church St.  
Baldwin, NY 11510

**Bell and Howell Audio Visual Products Division**  
7100 McCormick Rd.  
Chicago, IL 60645

**Bowmar/Noble Publications**  
Division of Economy Co.  
220 E. Danieldale Dr.  
DeSoto, TX 75115-2490

**Children's Press**  
Division of Grolier, Inc.  
5440 N. Cumberland Ave.  
Chicago, IL 60656  
800-621-1115

**Creative Publications**  
788 Palomar Ave.  
Sunnyvale, CA 94086

**Developmental Learning Materials (DLM)**  
One DLM Park  
Box 4000  
Allen, TX 75002  
800-527-4747

**EBSCO Curriculum Materials**  
P.O. Box 1943  
Birmingham, AL 35201  
(205) 995-1567

**EC Publishing**  
300 York Ave.  
St. Paul, MN 55101  
800-328-1452

**EIKI International, Inc.**  
26794 Vista Terrace Dr.  
Lake Forest, CA 92630  
(714) 457-0200

**Edmark Corporation**  
P.O. Box 3093  
Bellevue, WA 98009  
800-426-0856

**Educational Design**  
47 W. 13th St.  
New York, NY 10011  
800-221-9372

**Educational Insights**  
19560 S. Rancho Way  
Dominguez Hills, CA 9022  
800-995-4436

**Educational Research Foundation, Inc.**  
3084 W. Willard Rd.  
Birch Run, MI 48415

**Educational Teaching Aids**  
Division of A. Daigger and Co.  
159 W. Kinzie St.  
Chicago, IL 60606

**Family Communications, Inc.**  
4802 Fifth Ave.  
Pittsburgh, PA 15213  
(412) 687-2990

**Glencoe**  
Macmillan/McGraw Hill  
936 Eastwind Dr.  
Westerville, OH 43081-3374

**Globe Book Company, Inc.**  
190 Sylvan Ave.  
Englewood Cliffs, NJ 07632

**Great Ideas, Inc.**  
40 Oser Ave.  
Hauppauge, NY 11788  
(516) 273-2291

**Idaho Department of Education**  
650 West State Street  
Boise, ID 83720  
(208) 334-3300

**Insta-Learn**  
P.O. Box 887  
Mukilteo, WA 98275-0887  
800-225-7837

**Institute for Learning and Development**  
2201 North Lamar  
Austin, TX 78705

**Invicta International Educators**  
Invicta Plastics LTD.  
Oadby, Leicester, LE 2 4LB  
England  
Telephone: OADBY 3356

**Jamestown Publishers**  
P.O. Box 9168  
Providence, RI 02940  
800-872-7323

**Kids Rights**  
10100 Park Cedar Dr.  
Charlotte, NC 28210  
800-892-KIDS

**The Learning Connection**  
11040 W. Blue Mound Rd.  
Milwaukee, WI 53226

**Media Materials, Inc.**  
1821 Portal St.  
Baltimore, MD 21224  
800-638-1010

**Milton Bradley**  
Springfield, MA 01101

**Minnesota Department of Education**  
Unique Learner Needs Section  
550 Cedar Street  
St. Paul, MN 55101  
(612) 296-2358

**Modern Curriculum Press**  
13900 Prospect Rd.  
Cleveland, OH 44136  
800-321-3106

**Modern Education Corporation**  
P.O. Box 721  
Tulsa, OK 74101

**National Center for Research in Vocational Education**

Ohio State University  
1960 Kenny Rd.  
Columbus, OH 43210  
(616) 292-4248

**Oklahoma Secondary Learning Disabilities Project**

Oklahoma Child Service Demonstration Center  
101 West Broadway  
Cushing, OK 74023

**PRO-ED**

8700 Shoal Creek Blvd.  
Austin, TX 78758-6897  
(512) 451-3246

**Playskool**

1750 N. Lawndale Ave.  
Chicago, IL 60606

**Project MELD**

University of Pittsburgh  
Department of Instruction and Learning  
4200 Fifth Avenue  
Pittsburgh, PA 15213

**Raintree Steck-Vaughn**

310 W. Wisconsin Ave.  
Milwaukee, WI 53203  
800-558-7264

**Random House, Inc.**

201 E. 50th St., 22nd Floor  
New York, NY 10022  
800-733-3000

**Recording for the Blind**

20 Rozel Rd.  
Princeton, NJ 08540  
(609) 452-0606

**Scholastic Book Services**

P.O. Box 120  
Bergenfield, NJ 07621  
800-325-6149

**Science Research Associates (SRA)**

Division of Macmillan/McGraw Hill  
155 N. Wacker Dr.  
Chicago, IL 60606  
800-722-5351  
SRA Order Depart.  
P.O. Box 543  
Blacklick, OH 43004-0543  
800-621-0476

**Serif Publishing**

Division of Xerox Corporation  
701 S. Aviation Mail Stop ESCP-322  
El Segundo, CA 90245  
800-762-4496  
Distributed by:  
Publishers Group West  
4065 Hollis St.  
Emeryville, CA 94608  
800-788-3123

**Society for Visual Education, Inc. (SVE)**

1345 Diversey Pkwy.  
Chicago, IL 60614  
800-829-1900

**Spellbinder, Inc.**

33 Bradford St.  
Concord, MA 01742  
800-225-1997

**Sunburst Communications**

Dept. AW  
39 Washington Ave.  
Pleasantville, NY 10570  
800-431-1934

**The TIMES Center**

234 W. Galena St.  
Milwaukee, WI 53212  
(414) 277-4900

**United Learning**

P.O. Box 303  
Wilsonville, OR 97070-0303  
(503) 694-5032

**Wisconsin Council on Developmental Disabilities**

One W. Wilson St.  
P.O. Box 7851  
Madison, WI 53707-7851  
(608) 266-7826

**Wisconsin Department of Public Instruction**

Exceptional Education Mission Team  
125 S. Webster St.  
Madison, WI 53707  
(608) 267-3748

## Reading

### *Publications*

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### *Multimedia Kits and Equipment*

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- Composition Skills: Essential Writing Skills Series*. Filmstrip series. Produced by United Learning, 1984.
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- Peabody Picture Collection*. Card deck. Produced by AGS, 1983.
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*Success and Independence: Steps to Success.* Produced by The Learning Connection Co., 1980.

*Understanding Jobs and Careers.* Filmstrip. Developed by Learning Tree Filmstrips, Educational Design, Inc., 1977.

*When I Grow Up, I Want To Be.* Flannel board. Developed by Instructo. Produced by McGraw Hill, 1976.

*Work Habits and Attitude.* Multimedia kit. Developed by Harvest Educational Labs., 1981.

*Working for a Living: Why Work?* Filmstrip and audio cassette. Developed by the McKnight Publishing Company, 1978.

## Eligibility Criteria for Learning Disabilities

Learning disability is specified and defined in laws that affect public education services to this population of students. Chapter 115 of the Wisconsin Statutes defines learning disabilities in its related regulation, PI 11.35(2)(f)1, Wisconsin Administrative Code. Additional information and requirements related to the identification of learning disabilities is found in federal regulations and in Wisconsin's Administrative Code, PI 11.35(2)(f).

The information in this appendix includes the Wisconsin definition of learning disabilities, Wisconsin's regulations for identification of learning disabilities, eligibility criteria, and interpretation of those regulations. The legislation appears in double-column format, the author's interpretation in single columns of text following.

The major topics in this appendix are

- Wisconsin Definition of Learning Disabilities
- Academic Functioning
- Examples
- Evidence of In-Child Deficit
- Intellectual Functioning
- Exclusionary Factors
- Reevaluation and Dismissal

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### *Wisconsin Definition of Learning Disabilities*

#### **Legislation**

**PI 11.35(2)(f)1.** The handicapping condition of learning disabilities denotes severe and unique learning problems due to a disorder existing within the child which significantly interferes

with the ability to acquire, organize or express information. These problems are manifested in school functioning in an impaired ability to read, write, spell or arithmetically reason or calculate.

**Interpretation** Evaluators must address the following areas when evaluating a student suspected of having a learning disability:

- academic functioning
- evidence of in-child deficit
- intellectual functioning
- exclusionary factors

The M-team is charged with the responsibility of addressing two questions:

- Does the student have a handicapping condition?
- Does the student require exceptional education services?

To respond to the first question, the M-team must be able to document that the student meets the criteria specified in PI 11, Wis. Adm. Code.

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### *Academic Functioning*

#### **Legislation**

**PI 11.35(2)(f)2(a).** Academic functioning. A child whose primary handicapping condition is due to learning disabilities shall exhibit a significant discrepancy between functional achievement and expected achievement. A significant discrepancy is defined as functional achievement at or below 50 percent (.5) of expected achievement.

i. The child when first identified, shall have a significant discrepancy in functional achievement in 2 or more of the readiness or basic skill areas of math, reading, spelling and written language. To determine a significant discrepancy in the readiness areas the M-Team shall consider the child's receptive and expressive language and fine motor functioning. A significant discrepancy in the single area of math,

accompanied by less significant, yet demonstrable discrepancies in other basic skill areas may satisfy the academic eligibility criteria.

ii. Functional achievement is defined as the child's instructional level in readiness and basic skill areas. Determination of functional achievement shall be based on a combination of formal and informal individualized tests, criterion-referenced measures, observations and an analysis of classroom expectations in basic skill areas.

iii. The following formula shall be used to determine expected achievement:  $IQ \times \text{years in school}$ . Years in school is defined as the number of years of school completed since enrollment in 5-year-old kindergarten. A child who entered first grade without benefit of kindergarten should have a factor of one year added to that child's total years in school for computational purposes.

iv. The following formula yields a grade score to which the child's previously determined functional achievement level is compared. If the functional achievement level is at or below the grade score derived from the formula a significant discrepancy exists:

$IQ \times \text{Years in School} \times .5 = \text{Grade Score}$  (50 percent of expected achievement). This formula is inappropriate for children who have not com-

pleted 2 years in school. Children entering kindergarten or first grade who are achieving in readiness areas one or more years below expected achievement levels for their chronological age may be considered as having a significant discrepancy between their functional and expected achievement levels. See appendix J [of Wisconsin PI 11] for examples.

v. A child whose functional achievement approaches but is not at or below 50 percent of expected achievement may be considered to have met the academic functioning criterion if the child demonstrates variable performance between the sub-skills required for each of the areas of reading, writing, spelling, arithmetical reasoning or calculation and if the child meets all the other criteria used to identify the handicapping condition of learning disabilities. This determination shall be based on the M-team's collective judgment and the rationale shall be documented in the M-team report.

vi. In attendance centers where the number of children functioning at or below 50 percent of expected achievement exceeds that which might be anticipated for the general population, additional efforts shall be made to substantiate that the child's functional achievement level is due to a disorder existing within the child and not due to those conditions enumerated in sub. (2).

**Interpretation** Determination of a significant discrepancy requires that the members of the M-team define an expected achievement level for the student and a functional achievement level for each of the following three areas: basic skills, readiness, or readiness for basic skills. Functional achievement levels are determined by a combination of formal and informal assessment tools, review of records, observation of performances in classrooms, interviews, and the professional judgment of the M-team members.

The basic skill or readiness for basic skill areas are reading, spelling, written language, and mathematics. The readiness areas are receptive language, expressive language, and fine motor skills.

Receptive language dysfunctions include:

- difficulty in understanding single words,
- echolalia,
- lack of tone discrimination (distinguishing among pitch levels), and
- the inability to discriminate among, or to blend sounds.

Expressive language dysfunctions include:

- dependence on non-verbal expression,
- inability to remember and express words (dysnomia),
- use of substitutions to avoid difficult words,
- inability to make appropriate sounds (apraxia), and
- difficulty in formulating complete sentences.

Fine motor skill dysfunctions include the inability to

- grasp a pencil,
- catch a ball,

- cut with scissors,
- lace shoes, or
- copy designs.

*Significant* discrepancy is determined by one of two methods:

- For children with less than two years of formal education (excluding Head Start, pre-school, 4-year-old kindergarten, and early childhood-EEN), a one-year delay or more based on chronological age must exist in the readiness areas of receptive language, expressive language, and fine motor skills or in two of the readiness areas for basic skill areas of reading, spelling, written language, and mathematics. It is not appropriate to determine that a child has a learning disability if the child functions at a basic skill readiness level typical of and appropriate to his or her chronological age but significantly below an inflated expectation level established by a specific school, district, curriculum, or individual.
- For children with two or more years of formal education (including years retained), the M-team shall use the modified Bond and Tinker Formula described in PI 11.35(2)(f)2.a.iv.

*Demonstrable* discrepancy refers to a discrepancy between expected achievement and functional achievement that is significantly large but does not meet the 50 percent discrepancy otherwise required in this criterion.

### Examples

#### Legislation

**PI 11.35 Appendix J.** The formula used is a modification of a reading expectancy formula developed by Bond and Tinker (Bond, G.L., and Tinker, M.A., *Reading Difficulties: Their Diagnosis and Correction* (2nd ed.) New York, Appleton-Century-Crofts, 1967). The Bond and Tinker studies indicate that the predicted achievement scores derived from the original formula ( $\text{IQ} \times \text{years in school} + 1.0 = \text{expected reading grade}$ ) closely approximate actual reading achievement. Because the components of the formula are general, i.e., number of "years in school," and intelligence, it is believed that this formula can be adapted and appropriately applied to all the academic areas specified in PI 11.34(2)(g).

The Bond and Tinker formula did not include five year old kindergarten in "years in school" but in effect allowed for it by adding in a 1.0 factor. To simplify the formula and to ensure that the child is constantly compared to the same referent group, five year old kindergarten was added to the formula and the 1.0 factor deleted. This should ease computation without detracting from the accuracy of the formula.

Definition of factors in formula:

A. IQ—full scale score derived from an individual measure of intellectual functioning. IQ should be written as a decimal, for example 87 equals .87, 105 equals 1.05, etc.

B. Years in school—number of years in school beginning with five year old kindergarten.

The Bond and Tinker formula was weighted by a factor of .5 (50 percent) in order to indicate the level at or below which a child must function to exhibit a significant discrepancy. The full formula then is:

$(\text{IQ} \times \text{years in school}) \times .5 = \text{grade score}$  (50 percent of expected achievement).

Examples utilizing this formula are:

A. A child beginning the fifth year of school (beginning fourth grade, e.g., 4 years in school) with a measured full scale IQ of 92 (.92) would have a grade score computed in the following manner:

$$(.92 \times 4) \times .5 = (3.60) \times .5 = 1.8$$

B. A child in the seventh month of second grade, who is repeating second grade, with a measured full scale IQ of 101 (1.01) would have a grade score computed in the following manner:

$$(1.01 \times 3.7) \times .5 = (3.7) \times .5 = 1.9$$

C. A child in the ninth year of school (eighth grade) with an IQ of 113 (1.13) who is identified in January, would have a grade score computed in the following manner:

$$(1.13 \times 8.5) \times .5 = (9.6) \times .5 = 4.8$$

D. A child entering kindergarten at 5 years of age with average ability and functioning at or below a four year level in two or more of the readiness areas will meet the academic criteria of eligibility. The formula for establishing grade score should not be used.

E. A child entering third grade at the age of eight who has not completed three years in school (no kindergarten) would have a factor of

1.0 added to the years in school for determining grade score (50 percent of expected achievement).

$$\begin{aligned} & (\text{IQ} \times \text{years in school}) \times .5 - \text{grade score} \\ & (1.00 \times 2 + 1) \times .5 = \\ & (2.00 + 1) \times .5 = \\ & 3.0 \times .5 = 1.5 \end{aligned}$$

Therefore if this 8 year old child entering third grade is achieving at the 1.5 grade level or

below in 2 or more of the readiness or basic skill areas, this child will meet the academic criteria of eligibility.

F. A child entering first grade who has average ability and has completed 2 years in school (retained in kindergarten) would have the formula applied for establishing grade score.

$$(.90 \times 2) \times .5 = 1.80 \times .5 = .9$$

**Interpretation** For a determination of learning disabilities, the child shall have a significant discrepancy in two or more of the areas of reading, spelling, written language, and mathematics. A significant discrepancy in mathematics alone may qualify the child as learning disabled if a less significant discrepancy exists in other basic skill areas.

M-team members should recognize the standard error of measurement and possible human error that exists when they apply a numerical value to a child's potential to learn and to a child's demonstrated level of learning. These numbers are not accurate to the nearest one or two percent. So a child who demonstrates functional achievement at, below, or even near 50 percent of expected achievement may be determined eligible if the following occurs. The child must demonstrate a noticeable variable performance between the sub-skills required for *each* of the basic skill areas and meet the other three criteria. The three following samples correlate to the examples in appendix J, above:

In example "A," a child beginning fourth grade (starting the fifth year of school after completing kindergarten, first grade, second grade, third grade) would have a grade score computed in the following manner:

$$(.92 \times 4.0) \times .5 = (3.68) \times .5 = 1.84$$

In example "C," an eighth grade student identified in January with an IQ of 113 (1.13) has completed 8.5 years in school (kindergarten through seventh grade and half of eighth grade) would have a grade score computed as indicated in appendix J of PI 11.35.

And in example "F," a student with average ability entering first grade was retained in kindergarten; therefore, the student has completed two years of school (kindergarten).

One of the major concerns in the field of learning disabilities has been the overidentification or misidentification of students as learning disabled. Bateman\* identifies a key factor in this concern: educators "fear that courts expect objective quantification as the sole or major basis for decision making. Nothing could be further from the truth. The courts show the highest respect for professional judgment."

Many educators believe that the distinction between a learning disability and underachievement for other reasons is too vague for adequate diagnosis. Again, Bateman argues that the inability of many diagnosticians to make this distinction does not mean that it cannot be done. Her analysis of the teams assigned to make this decision has discovered people highly qualified to make eligibility decisions. The problem that causes the confusion is that "in many states the learning disabilities eligibility decision is actually made by someone, often a school psychologist, who has never taught and who has little frame of reference in which to evaluate a child's response to instruction."

With excessive emphasis on test scores and formulas, decisions are made in spite of the best professional judgment of the members of an evaluation team. Bateman says, "Experience suggests that when a formula is used, it too often is the sole basis for the eligibility decision. In the event of a legal challenge, the burden on the school to show that it did not rely on the formula often proves impossibly heavy."

\* Bateman, B. "Learning Disabilities: The Changing Landscape." *The Journal of Learning Disabilities* 25.1 (1992), p. 29-36.

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## *Evidence of In-Child Deficit*

### **Legislation**

**PI 11.35(2)(f)2.a.vii.** Evidence shall exist that the learning disabilities are primarily attributable to a deficit within the child's learning system. In documenting this in-child variability academic and non-academic behaviors shall be considered.

**Interpretation** With this criterion, the M-team distinguishes between a student with learning disabilities and one with learning problems caused by other factors. No child can be determined to have a learning disability unless the M-team documents evidence of in-child deficit. The M-team should use a combination of formal and informal assessment tools, observation, interviews, and diagnostic teaching to determine intra-individual differences that only can be ascribed to an internal psychological, neurological, or other processing deficit. A profile showing a strength in mathematics and a weakness in reading is not evidence of in-child deficit. Performance involving similar or related skills or activities but resulting in significantly different success rates is more indicative of in-child deficit. Examples would be the following: ability to memorize the muscles in the human body, but not the letters of the alphabet; ability to add dollars and cents in the local store, but not on a worksheet; ability to comprehend auditorially presented material, but not visually presented material; ability to "decode" abstract symbols such as "x," "+," "e," "=", but not abstract symbols used in the English language (such as "e," "tch," "tion").

An in-child deficit does not include discrepancies between various academic areas, but *within* academic areas. This discrepancy is related to how the student receives and processes information, and it is manifested in discrepancies in performance in various settings.

Deficits in the following areas may be representative of in-child deficits.

- sequencing difficulty
- visual discrimination
- conceptualization
- auditory discrimination
- discrepancy between encoding and decoding skills
- auditory-visual integration
- visual-motor integration
- fine motor skills
- directionality
- spatial orientation symbolization
- symbolization
- figure-ground discrimination
- revisualization
- sensory integration
- laterality
- form perception
- haptic discrimination

The above list is not all-inclusive. The student may demonstrate other examples of in-child deficit and the M-team should document all examples. This list also is not a "cookbook" for in-child deficits. Areas listed above may represent other handicaps such as speech and language impairment, cognitive disabilities, traumatic brain injury, and many others.

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## *Intellectual Functioning*

### **Legislation**

**PI 11.35(2)(f)2.b.** Intellectual functioning. Children whose primary handicapping condition is due to learning disabilities shall exhibit normal or potential for normal intellectual functioning.

i. This measure of intellectual functioning may be established by a score above a minus one standard deviation on a single score intelligence instrument, or by a verbal or performance quotient of 90 or above on a multiple score intelligence instrument.

ii. The instrument used to establish this measure shall be recognized as a valid and comprehensive individual measure of intellectual functioning.

iii. If there is reason to suspect the test results are not true indices of a particular child's ability, then clarification of why the results are considered invalid shall be provided. Previous experience, past performance and other supportive data that intellectual functioning is av-

erage shall be present and documented in written form.

iv. There may exist rare cases of severe language involvement which detrimentally affect the learning disabled child's ability to perform adequately on intelligence tests given the language emphasis of these instruments. In these rare situations the importance of the intellectual criteria may be reduced given substantial evidence to indicate average ability.

**Interpretation** This criterion requires that a qualified person administer an individualized test of intelligence to the student. The test must be technically adequate.

Intellectual functioning refers to the overall ability or potential of the child, not to a single component or aspect of intelligence. It requires the use of professional judgment by all members of the M-team and clear and defensible documentation to justify the M-team's decision.

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### *Exclusionary Factors*

#### **Legislation**

**PI 11.35(2).** Handicapping condition. Educational needs resulting primarily from poverty, neglect, delinquency, social maladjustment, cultural or linguistic isolation or inappropriate instruction are not included under subch. V, ch. 115, Stats.

**PI 11.35(2)(f)3.** Learning problems when primarily due to the following, shall be excluded from consideration as learning disabilities:

a. The other handicapping conditions specified in s. 115.76(3), Stats.

b. Learning problems resulting from extended absence, continuous inadequate instruction, curriculum planning, or instructional strategies.

c. Discrepancies between ability and school achievement due to motivation.

d. Functioning at grade level but with potential for greater achievement.

**Interpretation** Learning disabilities can co-exist with one or more of the above factors. They become exclusionary if they are the primary *cause* of the learning problems.

A child who the M-team determines to have a learning disability and who is later dismissed because of the presence of an exclusionary factor may be a victim of discrimination or of inappropriate programming. Both are violations of state and federal laws and regulations.

In addition, federal review of Wisconsin LD eligibility criteria requires that learning problems which are primarily due to the exclusionary factors listed in PI 11.35(2) shall also be excluded from consideration as learning disabilities. These exclusionary factors apply to all handicapping conditions listed in chapter 115 of the Wisconsin Statutes.

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### *Reevaluation and Dismissal*

The interpretation of the legislation that pertains directly to reevaluation of, and dismissal from EEN services is more appropriately a part of the M-team and IEP appendixes C and D, which follow. Most of the other legislation that refers to the issues of reevaluation and dismissal are in PI 11.03, PI 11.04, and PI 11.05. Wisconsin's legal eligibility criteria (PI 11.35(1)(a)) *does* refer to reevaluation in terms of a transition period for "a child out of special education who upon reevaluation does not meet criteria in the rules," but does not offer any more detail on the subject. It is important, however, to assess the impact of eligibility criteria on reevaluation and dismissal. Wisconsin's criteria for learning disabilities are entry-level criteria. Initially, the student must meet these criteria to be identified as having a learning disability and to qualify for exceptional education. The rules require that students with exceptional educational needs be reevaluated at least once every three years. Many learning disabled students no longer meet the significant discrepancy criterion after three years of good instruction. At the same time, they do not perform

at a high enough level to be successful in regular education without EEN support. M-teams find themselves torn between a strict interpretation of the criteria and the perceived needs of the students.

Because the significant discrepancy criterion is an entry-level criterion, it is not necessary for students with LD to demonstrate a significant discrepancy on reevaluation in order to continue in the learning disabilities program. Learning disabilities appear to be a permanent rather than a temporary condition. Unless the initial identification was incorrect, educators can assume the learning disability remains. Documentation of factors causing the change in identification is needed. The main question for the M-team at reevaluation is whether there is a need for exceptional education. If the need exists, the student should continue to receive exceptional education.

The academic career of a student with LD may include periods of time when he or she does not need exceptional education. At those times, dismissal from the program may be appropriate. If, at a later time, the student with learning disabilities demonstrates substantial problems in dealing with the regular program, he or she may return for exceptional education. This procedure requires a notice of intent to reevaluate and the full M-team process of a reevaluation.

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Figures 1 and 2 follow at the end of this appendix. They offer two different samples to educators who must assess students for LD.

## Sample Eligibility Criteria Overview 1

Student Name	Chronological Age	Date Mo/D/Yr
School	Grade	
Person Completing Report	Position	

**Eligibility Criteria:** To have a handicap in the category of learning disabilities, the student must meet all the criteria listed below.

**Normal Intellectual Functioning**

- |   |   |
|---|---|
| <input type="checkbox"/> Full scale intelligence of 85 or above.<br><input type="checkbox"/> A verbal or performance quotient of 90 or above on a multiple score intelligence test. | <input type="checkbox"/> Potential for normal intellectual functioning based upon previous experience, past performance, and other supportive data. |
|---|---|

**Academic Deficits**

- Significant discrepancies between functional achievement (FA) and expected achievement (EA) calculated as a grade score in two or more of the basic skill areas, or a significant delay based on chronological age in readiness areas.

	FA	EA
Reading		
Spelling		
Written language		
Mathematics		

OR

	FA	EA
Readiness for basic skills		
Readiness in language and fine motor		

- Significant discrepancies in math and a near significant discrepancy in one of the following areas. →

	FA	EA
Reading		
Spelling		
Written language		

Evidence that the learning disability is primarily due to deficits within the student's learning system as documented by in-child variability in academic or non-academic areas.

Deficit areas: \_\_\_\_\_

Strength areas: \_\_\_\_\_

Rationale: \_\_\_\_\_

Learning problems are not primarily due to hearing, visual, or motor impairment (*see health records for documentation*) or emotional disturbance, cultural difference, or educational deprivation such as: lack of motivation or functioning at grade level with potential for greater achievement.

**Diagnostic Prescriptive Summary**

This student  meets  does not meet all of the above criteria for the handicapping condition, learning disabilities.

Signature \_\_\_\_\_ Date \_\_\_\_\_

Figure 2

**Sample Eligibility Criteria Overview 2**

Student Name	Chronological Age	Date <i>Mo/D/Yr</i>
School	Grade	
Person Completing Report	Position	

*Criteria 1 Intellectual Functioning*

Function	Instrument Used	Other Supportive Evidence	
Full Scale of 85 or above			
Verbal or Performance of 90 or above			
Potential for normal intellectual functioning		Test Results	Documentation of Potential

*Criteria 2 Significant Discrepancy*

Expected Achievement Calculate IQ x Years in Schools	Significant Discrepancy cut-off level Calculate IQ x Years in Schools x .5
Determine functional achievement levels for the following:	
<b>Basic Skills/Readiness for Basic Skills</b> <input type="checkbox"/> Reading <input type="checkbox"/> Written Language <input type="checkbox"/> Spelling <input type="checkbox"/> Mathematics	<b>Readiness Areas</b> <input type="checkbox"/> Receptive Language <input type="checkbox"/> Expressive Language <input type="checkbox"/> Fine Motor
Compare functional achievement and significant discrepancy levels. (If functional level is at or below the grade score derived from the significant discrepancy cut-off level, a significant discrepancy exists.)	



## Multidisciplinary Team Process

This appendix provides an overview of the ongoing, multifaceted, multidisciplinary team process mandated by the Individuals with Disabilities Education Act (IDEA), Wisconsin Statutes chapter 115, and their supporting rules and regulations. It outlines and discusses the legal responsibilities of Wisconsin public schools, based on PI 11, Wis. Adm. Code, in meeting the special education needs of identified students. Legislation appears in the double-column format; author's interpretation follows in the single-column format.

The major topics in this section are

- Special Education Screening
- Special Education Referrals
- M-Team: Consent and Notice
- Appointment and Composition of M-Team
- M-Team Evaluation
- M-Team Meeting
- M-Team Report
- Reevaluation
- Notice for Identification

### *Special Education Screening*

#### **Legislation**

**PI 11.03.** Special education screening and EEN referrals. (1) SPECIAL EDUCATION SCREENING.

(a) A board shall have an ongoing special education screening program to locate and screen all children who are residents of the school district and who have not graduated from high school. A board may coordinate its special education screening program with other educational, medical and social service agencies' screening programs conducted within the district such as those for the early and periodic screening, diagnosis and treatment program in 42 CFR 441.50 to 441.62, day care agencies, perinatal clinics and mental health facilities.

(b) The director or program designee shall be responsible for developing and administering the board's special education screening program.

(c) As part of its special education screening program a board shall have policies and procedures for locating and screening each of the following groups:

1. Children below school-entry age.
2. Children entering school for the first time.

3. Children currently enrolled in public and private schools.

4. All transfer pupils.

5. School-age children who are eligible to attend school but who are not attending school and who are residents of the district.

(d) A board shall upon request screen any child.

(e) A board shall provide information and inservice opportunities to all of its licensed staff to familiarize them with behavioral descriptors which, in terms of frequency, chronicity or severity might indicate an EEN.

(f) At least once a year, a board shall publicize the special education screening program and the educational opportunities available in the community for children with EEN through such means as public announcements, notices or paid advertisements.

(g) A board shall ensure that an EEN referral is submitted for every child for whom, as a result of the board's special education screening program, it is determined that there is reasonable cause to believe that the child is a child with EEN.

**Interpretation** The first stage in the multidisciplinary team (M-team) process is screening and identifying the referral population to be evaluated. PI 11, Wis. Adm. Code, requires school boards to have policies in force to locate all children within their district who might be in need of exceptional educational services.

Each board shall have a special education screening program to locate and screen all children ages three to 21 who reside within the district and who have not graduated from high school. The

board's director or designee will be responsible for developing and administering this special education screening program and coordinating it with other agencies as needed. The LD teacher may be involved in screening children currently enrolled in public or private schools or EEN students who transfer into the district.

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### *Special Education Referrals*

#### **Legislation**

**PI 11.03(2). EEN REFERRALS.** (a) Any person who has reasonable cause to believe that a child is a child with EEN may submit an EEN referral to a school board. An EEN referral shall be in writing and it shall include the reasons why the person believes that the child is a child with EEN.

(b) A board shall establish written procedures for accepting and processing EEN referrals. A board shall document and date the receipt of each EEN referral.

(c) A board shall provide information and inservice opportunities to all of its licensed staff to familiarize them with the board's EEN referral procedures.

(d) At least annually, a board shall inform persons required to make EEN referrals under s. 115.80(1)(a), Stats., about the board's EEN referral and M-team evaluation procedures. This may be accomplished through the use of means such as public announcements, notices or paid advertisements.

(e) Prior to submitting an EEN referral to a board, a person required to make EEN referrals under s. 115.80(1)(a) or (b), Stats., shall inform the child's parent that he or she is going to submit the EEN referral. The person shall document the manner in which he or she informed the parent.

(f) A board shall accept and process all EEN referrals submitted to it regarding children who are residents of the school district and who have not graduated from high school.

(g) Whenever a board receives an EEN referral for a child, it shall send a written notice to the child's parent of the EEN referral. The notice shall be sent as soon as possible after receiving the EEN referral and it shall meet the requirements under s. PI 11.09(1). The notice shall also state the date of receipt of the EEN referral and that in accordance with s. PI 11.06(5)(a), the board is required to send to the parent a copy of the child's placement offer within 90 days of the date the board received the EEN referral.

**Interpretation** A critical decision in the screening to M-team process is the decision to refer. On a national level, approximately 75 percent of children referred are placed in exceptional educational programs. The M-team process is time consuming and costly. Research by Daniel J. Reschly of Iowa State University indicates an estimated cost of \$1,400 per case from the time of referral to placement. Although no one can legally stop a referral for suspected exceptional educational need, educators should attempt intervention strategies in the classroom *before* making a referral. An EEN referral rarely should be the first step in dealing with a student's learning difficulties.

Once the district decides to refer a student for suspected EEN, it must notify parents of the impending referral, and it must document that notification. A referral must be in writing and must specify the reason for the child's referral. Each school board must establish a written procedure for accepting and processing referrals and must identify an employee as a fixed point of referral. That person will sign and date each referral documenting its receipt. The 90-day timeline commences on the date the board's designee receives the referral and refers to 90 calendar days.

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### *M-Team: Consent and Notice*

#### **Legislation**

**PI 11.04(1). CONSENT AND NOTICE FOR THE M-TEAM EVALUATION PROCESS.** (a)1. Except as provided in subd. 3, a board may not conduct an M-team evaluation of a child without the parent's written consent. The consent obtained by the board shall meet the requirements under

s. PI 11.09(2)(a) and, if the child is determined to be a child with EEN, the consent shall continue in effect and thereby grant consent for subsequent reevaluations until the parent revokes his or her consent in writing.

2. Except as provided in subd. 3, a board may not conduct a reevaluation of a child if the

child's parent has revoked his or her consent for an M-team evaluation unless the parent grants consent again.

3. If a parent refuses or revokes his or her consent for an M-team evaluation, a board may initiate a hearing under s. PI 11.10 to determine whether the board shall conduct an M-team evaluation of a child without the child's parent's written consent.

**Interpretation** The board must obtain written parental consent prior to an M-team evaluation of a referred child. When parental consent has been obtained and the child is determined by an M-team to be a child with an EEN, the consent will continue to be in effect for all subsequent re-evaluations until the parent revokes that consent in writing. While reevaluations do not require newly acquired parental consent, notice of the reevaluation must be sent to parents.

### *Appointment and Composition of M-Team*

#### **Legislation**

**PI 11.04(2)(a).** APPOINTMENT AND COMPOSITION. Whenever a board receives an EEN referral for a child who is a resident of the district and who has not graduated from high school, the board shall appoint an M-team to conduct an M-team evaluation of the child to determine whether the child is a child with EEN. The board shall select the members of an M-team for their expertise in the handicapping condition the child is suspected to have. All members of an M-team shall be employes of the board; a CESA or CHCEB serving the district; a board that is a participant in a 66.30 agreement entered into by the board; a district that has entered into an agreement under s. 121.85, Stats., with the board; a board within the district's CESA, if the employes are serving the district through a CESA program; the Wisconsin school for the visually handicapped; or, the Wisconsin school for the deaf. An employe of the Wisconsin school for the visually handicapped or of the Wisconsin school for the deaf may not be appointed to an M-team unless he or she is licensed under subch. VII of ch. PI 3, is not management personnel, and has been designated by the superintendent of his or her school as being available to participate on an M-team. The professional recommendations made by staff members of the Wisconsin school for the visually handicapped and the Wisconsin school for the deaf, when serving as members of

(b) Whenever a board proposes or refuses to initiate or change the M-team evaluation process, it shall send a written notice to the child's parent of its intent to so propose or refuse. The notice shall be sent within a reasonable period of time before the proposed action or before the refusal to take action and shall meet the requirements under s. PI 11.09(1).

an M-team, shall not be construed to be those of the department. For purposes of this paragraph, a person is an employe of the board even if the only function that he or she is employed to perform is to serve as a member of an M-team.

(b) An M-team shall include all of the following:

1. An employe of the board.
2. At least 2 persons who are skilled in assessing children and programming for children with handicapping conditions. At least one of these 2 persons shall be a teacher who is licensed to teach in the handicapping condition that the child is suspected to have. If a child is suspected to have or is currently identified as having more than one handicapping condition, there shall be a teacher or teachers on the M-team who is or are licensed to teach in all of the child's suspected and currently identified handicapping conditions.
3. If a child is suspected of having a learning disability, the child's regular education teacher, if the child has one. If the child does not have a regular education teacher, a regular education teacher licensed to teach a child of his or her age.
4. Other individuals as needed to evaluate and determine the needs of the child.
5. If a child is suspected of needing occupational therapy, an occupational therapist.
6. If a child is suspected of needing physical therapy, a physical therapist.

**Interpretation** All M-team members must be employees of the education agency that is responsible for the evaluation, such as the school district or CESA. At least two individuals must be qualified to evaluate the student in the area of suspected disability. Typically, an M-team includes

a regular education teacher, a school psychologist, and an LD teacher when assessing a suspected learning disability.

For a suspected learning disability, the student's regular education teacher must be assigned to the M-team. The only time it is appropriate for a regular education teacher who is *not* the student's teacher to serve on the M-team is when the education agency or school district does not employ the student's teacher. This could occur if the student attends preschool or a private school. The teacher who serves on the M-team must be qualified to teach the student's age group.

No individual may attend the M-team meeting unless that person is listed as an M-team member, as a consultant, as an individual notified of the M-team meeting, or an advocate selected by the parent. All individuals attend the meeting in the interest of the student. No one represents a union, teacher, or district interest.

### *M-Team Evaluation*

#### **Legislation**

**PI 11.04(3)(a).** M-TEAM EVALUATION. The M-team shall examine all relevant available data concerning the child including the following:

1. Records concerning the child's previous and current educational performance, health and social behavior.

2. Records of previous interventions and special education programs provided to the child and the effects of the interventions and programs.

3. Records of the child's ability to acquire information via different media such as oral presentations, written documents and visual displays.

(b) If the child is suspected to be or is currently identified as being learning disabled, at least one member of the M-team, other than the child's regular teacher, shall observe the child's performance in the regular classroom. If the child is of less than school age or is out of school, the M-team member shall observe the child in an environment appropriate for a child his or her age.

(c) The parent shall be involved and consulted throughout the entire M-team process.

(d) The M-team shall use evaluation materials and procedures as needed to assess the child in all areas related to the suspected handicapping condition. If tests and other evaluation materials and procedures are used they shall meet the following requirements:

1. They shall be provided and administered to the child in the child's native language or other mode of communication, unless it is clearly not feasible to do so.

2. They may not be racially or culturally discriminatory.

3. They shall be validated for the specific purpose for which they are used.

4. They shall be administered by trained personnel in accordance with the instructions provided by their producer.

5. They shall be tailored to assess specific areas of educational need and not simply to provide a single general intelligence quotient.

6. Tests shall be selected to ensure that when a test is administered to a child with impaired sensory, manual, or speaking skills, the test results accurately reflect the child's aptitude or achievement level or whatever other factors the test purports to measure, rather than reflecting the child's impaired sensory, manual, or speaking skills, except where those skills are the factors which the test purports to measure.

(e) Any member of the M-team may request additional information or conduct additional tests at any time during the evaluation process.

(f) An M-team shall comply with pars. (a) to (d) prior to the M-team meeting under sub. (4).

(g) Each member of the M-team shall prepare a written report of the evaluations he or she conducted and the findings. The members shall submit their reports to the director or program designee with the proposed M-team report or reports under sub. (5)(d)1, unless the parent asks to have the individual reports available at the M-team meeting. The members shall have their individual reports available at the M-team meeting if the parent requests that in writing within 10 days of the date the board sent the notice of the M-team evaluation under sub. (1)(b).

(h) An M-team may consult with persons other than employees of the board if it is needed to appropriately assess whether a child is a

child with EEN. Individuals other than employees of the board may not be appointed official members of an M-team.

**Interpretation** Once the M-team receives legal permission to evaluate the student and appoints its members, it initiates assessment in the appropriate area(s). The LD teacher should consult with the other personnel as they select appropriate evaluation instruments and procedures, assess the student, observe the student in the classroom, and prepare individual reports to present at the M-team meeting. An M-team member other than the regular education teacher must conduct an observation of the child and it must occur in the regular, non-special education environment.

Each member of the M-team must write an individual report and include all relevant information including formal and informal test results, observations, interviews, and diagnostic assessment and teaching. Parents may request that these written individual reports be available at the M-team meeting. Parents must make the request in writing within ten days of the date they were notified of the M-team evaluation.

### *M-Team Meeting*

#### **Legislation**

**PI 11.04(4)(a). M-TEAM MEETING.** The board shall set a date for the M-team to meet and discuss the members' evaluations and findings and all the information obtained under sub. (3).

(b) The board shall notify the parent of the meeting within a reasonable amount of time prior to the meeting. The notice shall include all of the following:

1. The date, time and location of the meeting.
2. Information that the purpose of the meeting is to determine whether the child is a child with EEN.
3. The names and titles of the members of the M-team and any additional people who may be attending.
4. Information that the parent may attend the meeting and may bring an advocate.
5. If the child is a member of a minority, information that a member of that minority may attend the meeting and have input into the M-team's decision-making process.

(c) Each member of the M-team shall attend the meeting or shall be represented by a person who is knowledgeable about the child and the member's evaluations and findings.

**Interpretation** After all M-team members complete their evaluations, the director or program designee must notify parents and M-team members of the date, time, and place of the M-team meeting. Every effort should be made to include parents in this meeting, so the director should set the meeting at a time and place convenient to all.

Each member must attend the meeting or be represented by a person knowledgeable about the child and the member's evaluation. More than half of the assigned members must attend. For example, if three members serve, two must attend; if 16 members serve, nine must attend; and so on.

More than half of the members of the M-team shall be present at the meeting.

(d) At the meeting the M-team shall discuss and consider all of the information received under sub. (3) and it shall discuss and compare the evaluations and findings of each of the members. Based upon its evaluations and findings the M-team shall, using the criteria established in s. PI 11.35, determine if the child has a handicapping condition. An M-team may not find that a child has a handicapping condition based upon a single evaluation procedure. If the child is found to have a handicapping condition, the M-team shall determine whether as a result of the handicapping condition the child needs special education. The M-team shall reach a conclusion regarding whether the child is a child with EEN. If the M-team concludes that a child is a child with EEN, the M-team shall consider and make recommendations regarding what related services the child may need. If a need for occupational or physical therapy has been considered by the M-team, the M-team shall reach a conclusion regarding such need. An M-team may not reach a conclusion regarding the need for occupational or physical therapy unless an appropriate therapist is a member of the M-team.

## *M-Team Report*

### **Legislation**

**PI 11.04(5)(a).** M-TEAM REPORT. As a result of the M-team meeting, the M-team shall write an M-team report which shall include at least the following:

1. A list of the handicapping conditions that the M-team found the child to have using the criteria in s. PI 11.35.

2. The M-team's conclusions regarding whether the child needs special education because of a handicapping condition.

3. If the child's need for occupational or physical therapy was considered, the M-team's conclusions regarding such need.

4. A statement that documents the reasons for each of the M-team's findings and conclusions listed in subds. 1 to 3.

5. Recommendations regarding what related services the child may need.

(b) If an M-team finds that a child is not a child with EEN the M-team report shall also include the following:

1. An identification of the child's non-exceptional educational needs.

2. A referral to any programs, other than special education programs, offered by the board from which the child may benefit.

3. Information about any programs and services other than those offered by the board that the M-team is aware of that may provide a benefit to the child.

(c) If there is unanimous agreement among the M-team members about the information, findings and conclusions required in pars. (a) and (b), the M-team shall write one proposed M-team report which is signed by all of the members and which indicates the team's unanimity. If there is not unanimity among the M-team members, members of the M-team shall write separate proposed M-team reports that meet the requirements under pars. (a) and (b). M-team members may write a separate proposed M-team report individually or with other members. Each member of the M-team shall sign a proposed M-team report with which he or she agrees.

(d)1. After completing a proposed M-team report or reports under par. (c), the M-team shall send a copy of the proposed M-team report or reports to the director or program designee for his or her approval.

2. Subject to subds. 3 and 4, the director or program designee may approve as the M-team report for a child, the unanimously proposed M-team report or one of the separately proposed M-team reports submitted by the M-team under subd. 1.

3. If the director or program designee approves as the M-team report either a unanimously proposed M-team report, or a separately proposed M-team report that is signed by a majority of the M-team members, the director or program designee shall send to the board and to the child's parent, a copy of the approved M-team report and all of the separately proposed M-team reports submitted. The director or program designee shall indicate which is the approved M-team report and shall state in writing why that report was selected. If the director or program designee intends to approve as the M-team report, a separately proposed M-team report that is signed by a minority of the M-team members, the director or program designee shall proceed as provided in subd. 4.

4.a. The director or program designee may approve as the M-team report, a separately proposed M-team report that is signed by a minority of the M-team members, if the director or program designee attended the M-team meeting that resulted in the proposed M-team reports. The director or program designee shall send to the board and to the child's parents, a copy of all of the separately proposed M-team reports submitted and the director or program designee shall indicate which is the approved M-team report and shall state in writing why that report was selected.

b. If the director or program designee intends to approve as the M-team report, a separately proposed M-team report that is signed by a minority of the M-team members, and the director or program designee did not attend the M-team meeting which resulted in the proposed M-team reports, the director or program designee shall set a date for the director or program designee to meet with the M-team and to discuss the proposed M-team reports. The director or program designee shall notify the parent of the meeting within a reasonable amount of time prior to the meeting and the notice shall include the information listed in sub. (4)(b). Each member of the M-team shall attend the meeting or shall be represented by a person who is knowl-

edgeable about the child and the member's evaluations and findings. More than half of the members of the M-team shall be present at the meeting. At the meeting the M-team and the director or program designee shall discuss the members' evaluations and findings and the separately proposed M-team reports. Any member of the M-team may amend his or her proposed M-team report as a result of the meeting. After the meeting the director or program designee may approve as the M-team report any one of the separately proposed M-team reports as the M-team report, the director or program designee shall send to the board and to the child's parent, a copy of all of the separately proposed M-team reports submitted and the director or program designee shall indicate which is the approved M-team report and shall state in writing why that report was selected.

5. If the child's parent was unable to attend the most recent M-team meeting, the director or program designee shall send with the approved M-team report and any separately proposed M-team reports, a notice informing the parent that the parent may request a conference with the director or program designee to discuss any proposed M-team report and the approved M-team report and that an advocate may accompany the parent.

6.a. If the director or program designee does not accept the unanimously proposed M-team report or any of the separately proposed M-team reports as the M-team report, he or she shall send the proposed report or reports back to the M-team with a list of questions that the director or program designee wants the M-team to consider. The director or program designee may appoint additional members to the M-team. The new members shall comply with sub. (3)(a) to (e) prior to a new M-team meeting.

**Interpretation** One purpose of the M-team report is to summarize the information gathered during the evaluation. This includes existing information, parental interview information, assessment information, and observation information. Because the M-team is responsible for answering two primary questions, the M-team's report must document its answers to those questions:

- Does the student have a handicapping condition?
- Is there a need for exceptional education?

Documentation of the handicapping condition requires documentation that the student meets eligibility criteria. The M-team must also document the need for special education and any related services. If the report does not establish an EEN, it must reflect the M-team's recommendations to meet the student's non-EEN needs and determine programs that might assist in meeting those needs.

b. When the director or program designee does not accept a proposed M-team report the director or program designee shall set a date for the M-team to meet and discuss the director's or program designee's concerns. The M-team shall notify the parent of the meeting within a reasonable amount of time prior to the meeting and the notice shall include the information listed in sub. (4)(b).

c. Each member of the M-team shall attend the meeting or shall be represented by a person who is knowledgeable about the child and the member's evaluations and findings. More than half of the members of the M-team shall be present at the meeting. At the meeting the M-team shall address the questions and issues raised by the director or program designee. Any member of the M-team may amend his or her proposed M-team report as a result of the meeting.

d. After the meeting in subd. 6.a, the M-team shall send a copy of the unanimously proposed M-team report or all of the separately proposed M-team reports to the director or program designee for his or her approval.

e. After receiving the proposed M-team report or reports, the director or program designee shall approve an M-team report. If the director or program designee approves as the M-team report a unanimously proposed M-team report or a separately proposed M-team report that is signed by a majority of the M-team members, the director or program designee shall comply with subds. 3 and 5. If the director or program designee intends to approve a separately proposed report that is signed by a minority of the M-team members, the director or program designee shall comply with subds. 4 and 5.

All M-team members must sign an M-team report with which they agree. If they do not agree, M-team members may write separate reports. See figure 1, "M-Team Flow Chart," for procedures related to multiple M-team reports.

More than half of the M-team members must be present for an M-team meeting. If an invited member cannot attend, she or he may submit a written report to a representative who presents the absent member's findings and recommendations at the M-team meeting. This representative should sign the report for the absent member. The representative may be a member of the M-team, however, no one member may "wear two hats," that is, fill two or more of the required positions on the M-team. All M-team members must submit their completed reports to the director/designee.

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### *Reevaluation*

#### **Legislation**

**PI 11.04(6)(a).** REEVALUATION. A board shall initiate a reevaluation for each child who is receiving special education as follows:

1. No later than 3 years from the date the last M-team report completed on the child was approved under sub. (5)(d).

2. Whenever the board has reason to believe that the child is no longer a child with EEN;

3. Whenever the board has reason to believe that the child no longer has a previously identified handicapping condition;

4. Whenever the board has reason to believe that the child has a handicapping condition that has not been identified; and

5. Whenever a child's parent or teacher requests a reevaluation.

(b) Any board and M-team that is conducting a reevaluation shall comply with the requirements under this section.

(c) Except as otherwise provided by law, a board may not stop providing special education to a child unless, as a result of a reevaluation, an M-team determines that the child is no longer a child with EEN.

(d) A board may not identify or cease to identify a child as having a handicapping condition unless that is a determination made by an M-team as a result of an M-team evaluation.

**Interpretation** The district must conduct reevaluations for all students identified as learning disabled and in need of exceptional education. It must hold these evaluations at any time that it determines a reevaluation is necessary. Examples would be changing the student's area of disability, or dismissing the student from special education. They also must be held any time a parent or teacher requests a reevaluation. In addition, reevaluations must occur at least once every three years.

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### *Notice for Identification*

#### **Legislation**

**PI 11.04(7).** Whenever a board proposes or refuses to initiate or change the identification of a child as a child with EEN it shall send a written notice to the child's parent of its intent to so propose or refuse. The notice shall be sent within a reasonable period of time before the proposed action or before the refusal to take

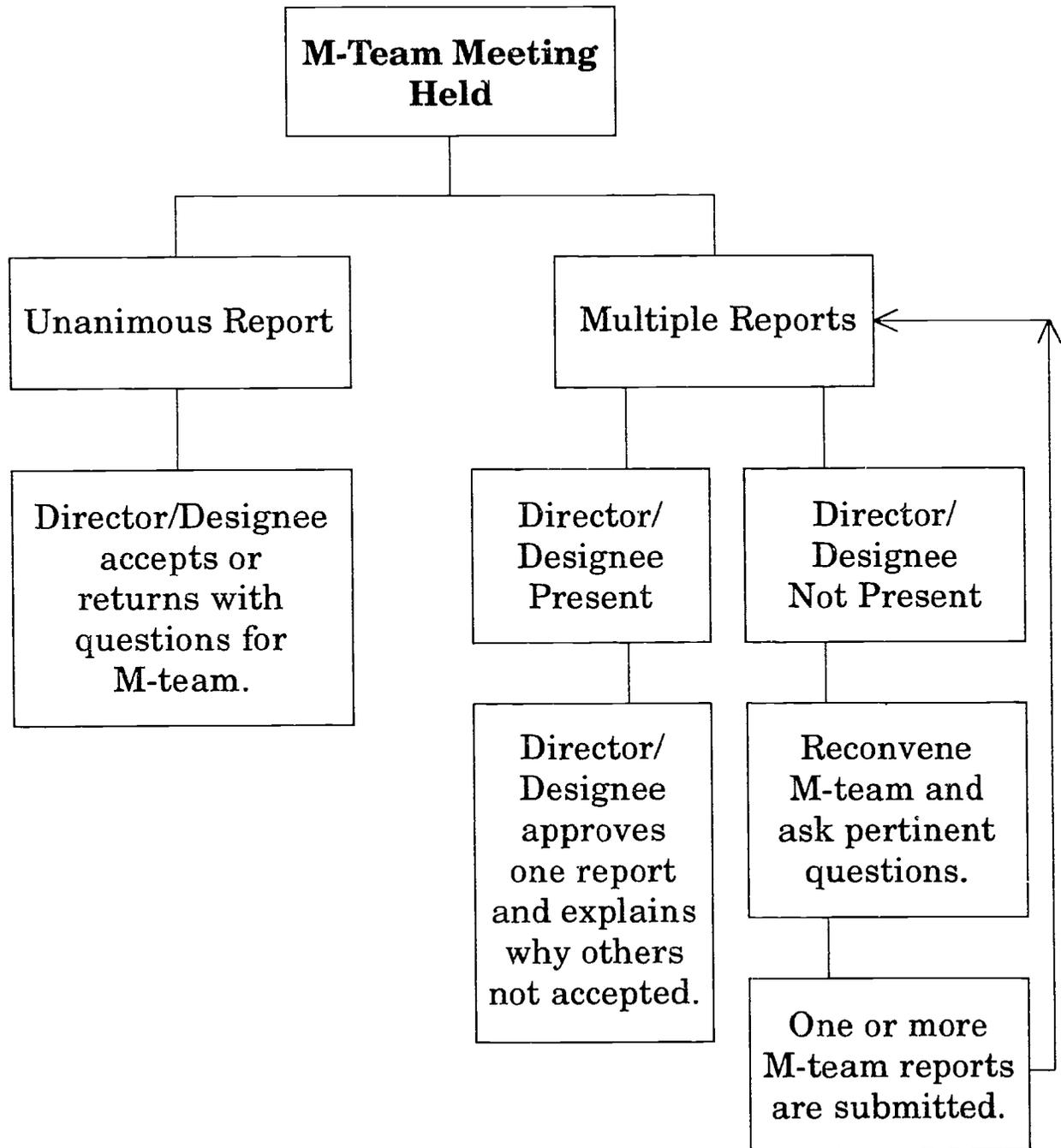
action and shall meet the requirements under s. PI 11.09(1).

**PI 11.04(8).** A parent may initiate a hearing under s. PI 11.10 whenever a board proposes or refuses to initiate or change the M-team evaluation process or the identification of a child as a child with EEN.

**Interpretation** If the district proposes to conduct a reevaluation, it must notify the parents. If parents request a reevaluation and the district refuses, it must notify the parents of that refusal. Both notices require the district to inform the parents of their rights as identified in PI 11.09 (Wis. Adm. Code).

Figure 1

### M-Team Flow Chart



## Individualized Education Program

This appendix offers information, both legal and interpretive, about individualized education program (IEP). Wisconsin's legislation appears in a double-column format, and the author's interpretation of the legal definitions follows in a single column.

The major topics in this section are

- Staffing
- The IEP Meeting
- Transition Services
- Parental Participation
- The IEP Document: Mandated Components
- Other Mandated Components
- Review of the IEP
- Purpose
- Notice and Hearings

### *Staffing*

#### **Legislation**

**PI 11.05. INDIVIDUALIZED EDUCATION PROGRAM.** (1) **APPOINTMENT OF STAFF.** When an M-team report is approved under s. PI 11.04(5)(d) indicating that a child who is 3 years of age or older, a resident of the school district and who has not graduated from high

school, is a child with EEN, a board shall appoint staff to develop an IEP for the child. The staff appointed by the board shall include a person who is knowledgeable about the child, the type of evaluation data available on the child and the program options.

**Interpretation** The responsibility of the public schools is to provide a free and appropriate education (FAPE) to all students. The principal device for achieving this free and appropriate education for students with disabilities is the individualized education program (IEP). Since the enactment of the Individuals with Disabilities Education Act (IDEA), each student must receive an individually designed program of educational services developed by participants, including parents. The IEP ensures that educators tailor educational programs to meet the individual needs of each student with disabilities. Through a shared partnership with the parents, the school provides an intervention framework that enables the student to succeed and grow.

### *The IEP Meeting*

#### **Legislation**

(2) **IEP MEETING.** (a) The board shall set a date for a meeting to discuss the special education program and related services needs of the child and to develop an IEP for the child. The meeting shall be held within 30 days after an M-team report is approved under s. PI 11.04(5)(d) indicating that the child is a

child with EEN. The time and location of the meeting shall be agreed upon by the board and the child's parent. The board shall ensure that the reports required under s. PI 11.04(5)(c) and (d) are completed and in writing prior to the IEP meeting. These reports shall be available to the parent prior to the IEP meeting.

**Interpretation** An IEP meeting must be held within 30 calendar days after approval of an M-team report that indicates a student has an exceptional educational need. In order for all of the people who attend the IEP meeting to actively and knowingly participate, they must receive a completed, written M-team report prior to the IEP meeting. These participants include parents.

## Transition Services

### Legislation

(b) The board shall ensure that each IEP meeting includes the following participants:

1. A representative of the board, other than the child's teacher, who is qualified to provide, or supervise the provision of, special education.

2. The child's teacher.

3. One or both of the child's parents, subject to sub. (5).

4. The child, if appropriate.

5. If the IEP process is initiated because of an initial eligibility determination of a child:

a. A member of the M-team that evaluated the child; or

b. A person who is knowledgeable about the evaluation procedures used with the child and is familiar with the report issued under s. PI 11.04(5).

5m. If a purpose of the IEP meeting is the consideration of transition services for a child, the board shall invite the following:

a. The child. If the child does not attend, the board shall take other steps to ensure that the child's preferences and interests are considered.

b. A representative of any other agency that is likely to be responsible for providing or

paying for transition services. If a representative under this subparagraph does not attend, the board shall take other steps to obtain participation of the other agency in the planning of any transition services.

6. If a child is enrolled in a private school and receives or is eligible to receive special education from the board, a representative of the private school. If the private school representative cannot attend the meeting the board shall ensure the school's participation by some other means such as individual or conference telephone calls.

7. If a board is considering placing the child in a private school, a representative of the private school. If the private school representative cannot attend the meeting the board shall ensure the school's participation by some other means such as individual or conference telephone calls.

8. Persons other than those specified in subs. 1 to 7 may attend the meeting at the discretion of the parent or the board.

(c) The participants at the IEP meeting shall review the child's M-team report written in accordance with s. PI 11.04(5) and shall consider the M-team's recommendations regarding related services.

**Interpretation** Amendments to the Individuals with Disabilities Education Act (IDEA) require that IEPs include a statement of the needed transition services for students beginning no later than age 16 and annually thereafter (and, when determined appropriate for the individual, beginning at age 14 or younger), including, when appropriate, a statement of the interagency responsibilities or linkages (or both) before the student leaves the school setting. In the case where a participating agency, other than the educational agency, fails to provide agreed upon services, the educational agency shall reconvene the IEP meeting to identify alternative strategies to meet the transition objectives. (20 USC 1401(a)(20))

Transition services, as defined by IDEA, are a coordinated set of activities for a student, designed within an *outcome-oriented process*. The coordinated set of activities shall be based upon the individual student's needs, taking into account the student's preferences and interests, and shall include instruction, community experience, the development of employment and other post-school adult living objectives, and, when appropriate, acquisition of daily living skills and functional vocational evaluation.

This process requires a sharing of transition programming responsibilities among vocational education, employment specialists, postsecondary education, social service and mental health specialists and special education. In addition, the student and his or her parents are crucial participants in this process. The goal of transition services is to provide a coordinated set of activities for a student that will lead a student from school to successful

- postschool activities,
- postsecondary education,
- vocational training,

- integrated employment (including supported employment),
- continuing and adult education,
- adult services,
- independent living, and
- community participation. (20 USC 1401(a)(19))

The IEPs of all students, 16 years of age and older (and age 14 and older in some cases), must contain a transition statement. This statement summarizes the transition activities in which the student will participate during the duration of the IEP and includes present levels of performance, annual goals, short-term objectives, and evaluation.

The *present level of educational performance* could include student preferences and interest. Curriculum domains, from which vocational long-term *goals* and short-term *objectives* must be written, may include community participation skills, personal and daily living skills, recreation and leisure skills, vocational and career skills, and postsecondary education skills. *Special education* and related services must also be designated. Since other agencies will no doubt be involved in this aspect of the IEP, representatives from participating agencies should have input in the IEP. Linkages may be addressed on the IEP by statements indicating that referrals will be made on specific dates to appropriate agencies, consultation with involved agencies will occur on a periodic basis, and so on. *Related services* for meeting the transition goal could be, for example, providing cab fare or bus passes for the student to get to the community site (transportation) or obtaining job counseling services from the Division for Vocational Rehabilitation. *Initiation dates and anticipated duration* of services must also be included, as well as a statement of justification for removal from regular education or regular education environment.

Each person who attends this meeting should be prepared to discuss the student's current educational needs in order to plan goals and objectives to meet those needs and recommend related services. Participants should bring pertinent information, including evaluation findings, statements of present levels of educational performance, and recommendations about goals and objectives for review and discussion. The participants also may review the M-team report to assist them in writing the IEP.

It is imperative that the representative of the school district board has the authority to commit the public agency's resources, including the provision of related services. It is the responsibility of this person to represent the public agency in the interpretation of system policy.

IEP meeting participants, other than those specified in the law, could include a parent advocate, an interpreter for hearing impaired or non-English speakers, or representatives from community agencies involved with the student or family such as the Division for Vocational Rehabilitation.

The child's teacher could be either a teacher qualified to provide special education in the child's area of suspected disability or the child's regular teacher. At the option of the agency, both teachers could attend.

### *Parental Participation*

#### **Legislation**

(3) PARENT PARTICIPATION. (a) The board shall send a written notice to the parents within a reasonable amount of time prior to the IEP meeting. The notice shall meet the requirements under s. PI 11.09(1) unless a notice meeting the requirements of s. PI 11.09(1) has been provided within the previous 30 days. The notice under this subsection shall include the following:

1. The date, time, and location of the meeting and information that the meeting must be scheduled at a time and place agreed upon by the board and the child's parents.

2. The purpose of the meeting.
3. The names and titles of the persons who will be attending the meeting.
4. Information that the parent may bring other people to the meeting.

(am) If a purpose of the meeting is the consideration of transition services for a child, the notice shall include the following:

1. The purpose;
2. That the board will invite the child;
3. Identification of any other agency that will be invited to send a representative.

(b) If no parent is able to attend the meeting the board shall ensure the parent's partici-

pation by some other means such as individual or conference telephone calls.

(c) If no parent can attend the meeting or participate by other means, the board shall maintain a record of its attempts to have the parent attend or participate in the meeting. Notes from any contact made with the parent such as telephone calls or visits to the home or

workplace and any correspondence with the parent shall be retained as part of the record.

(d) The board shall take the necessary steps to ensure that the parent understands what is said at the IEP meeting, including arranging for an interpreter if the parent is deaf or if the parent's primary language is other than English.

**Interpretation** The IEP is a joint venture between parents and school, so documentation must show three or more good faith attempts to arrange the meeting at a mutually agreeable time and place. Documentation of attempts (telephone logs, letters, and so on) should be in writing. Resourceful educators may explore various types of participation including conference calls, evening meetings, home visits, and others to ensure parent attendance.

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### *The IEP Document: Mandated Components*

#### **Legislation**

(4) THE IEP. (a) The IEP for each child shall include:

1. A statement of the child's present levels of educational performance.

2. A statement of annual goals, including short term instructional objectives.

3. The extent to which the child will be able to participate in regular educational programs.

4. A statement of the specific special education and related services including assistive technology services to be provided to the child.

5. The projected dates for initiation of services and the anticipated duration of the services.

6. Appropriate objective criteria and evaluation procedures and schedules for determining, on at least an annual basis, whether the short term instructional objectives are being achieved.

7. Beginning no later than age 16 and at a younger age, if appropriate, an annual statement of the needed transition services which includes a coordinated set of activities to be provided to the child, including, if appropriate, a statement of the board's, each public agency's, and each participating agency's responsibilities or linkages, or both, before the child leaves the

school setting. The coordinated set of activities under this subdivision shall meet the following requirements:

a. Be based on the individual child's needs, taking into account the child's preferences and interests;

b. Include instruction; community experiences; the development of employment and other post-school adult living objectives; and

c. If appropriate, include acquisition of daily living skills and functional vocational evaluation.

8. If a child does not need transition services in one or more of the areas under subd. 7b, a statement to that effect and the basis upon which the determination was made.

9. If a child has a visual handicap, a statement indicating whether the child needs to be taught braille. If the child does not need to be taught braille, a statement to that effect and the basis upon which the determination was made.

(b) A child's IEP may not include occupational or physical therapy unless the M-team has concluded that the child needs such therapy.

(c) Within the time period specified under s. PI 11.06(4), a board shall develop and implement a placement offer to carry out a child's IEP.

#### **Interpretation Present Levels of Educational Performance**

A statement of the present levels of educational performance is written by the IEP participant(s) for each area where the student has an exceptional educational need. This statement should accurately describe the effect of a student's disability on his or her educational performance. This level pertains to academic areas such as reading, math, and written language; to non-academic

areas such as daily living skills and interpersonal skills; and to vocational areas such as postsecondary education, job training, and community participation.

M-team reports or a review of the last IEP provide one source of information that IEP participants can use for writing these statements. Other sources of information, such as observations, anecdotal records, informal vocational surveys, reading inventories, formal achievement test results, and behavior inventories, also exist. The purpose of this information is to assist IEP participants in outlining the skills a student has and has not acquired, the student's individual learning style, indicators of learning rate, and anything else that would assist in devising an educational program.

These statements are written in objective, measurable terms. Each statement is based on evaluation data and should easily lead to instructional programming. These statements are not a diagnostic label. Rather, each is a written statement, relatively free of educational jargon, that describes student behavior. It can include formal test scores if they are easily interpreted. The following present levels of performance reflect three different areas.

<b>Reading</b>	<b>Behavior</b>	<b>Transition</b>
Can read 50 words per minute. Unable to retell what is read or answer questions related to passages and chapter information. Decoding skills are average. Enjoys comics.	Completes daily assignments with prompts and assistance. Completes 10 percent of homework. Needs support in study hall setting. Is willing to stay after school. Disorganized materials and locker.	Interest inventories indicate student is highly motivated to earn money. Attendance records indicate an average of seven to eight absences per quarter. Has difficulty completing tasks and taking the initiative.

#### Annual Goals and Short-Term Objectives

Annual goals are written for all the educational areas that the student's disability adversely affects. These goals are child-, not curriculum-centered and should state what educators can reasonably expect the student to accomplish in a 12-month period. There should be a direct relationship between the goals and the present levels of educational performance. These goals are positively stated and free of jargon. Most goals include language that describes the direction of behavior, *increase, decrease, maintain*; an area of need, *reading, daily living skills*; and can include a specific level of attainment or success, *to age level, or without assistance*. The number of goals to be written is related to the amount of service a student receives, and one goal must be written for each present level of performance. For students 16 years or older (or 14 years, if appropriate), the IEP must include goals addressing transition services.

When selecting goals, planners should consider whether or not the goal

- is age appropriate,
- is realistic based on the student's identified strengths and weaknesses,
- will enhance the student's ability to function more independently,
- is one that the student will have an opportunity to practice on a regular basis,
- is relevant to the student's long- and short-term goals,
- promotes integration with non-disabled peers.

The following examples are statements that reflect realistic goals.

<b>Reading</b>	<b>Behavior</b>	<b>Transition</b>
direction ..... <i>Will increase</i> area ..... <i>reading skills</i> level of attainment ... <i>to 100 percent of</i> <i>literal comprehension.</i>	direction ..... <i>Will submit</i> area ..... <i>class and home-</i> <i>work assignments</i> level of attainment ... <i>on time 90 per-</i> <i>cent of the time.</i>	direction ..... <i>Will complete</i> area ..... <i>work assignment</i> <i>responsibilities</i> level of attainment ... <i>as directed by</i> <i>employer.</i>

Short-term objectives are measurable, intermediate steps between a student's present levels of performance and the annual goals established for the student. Objectives are milestones, not weekly or daily objectives. These objectives are written in behavioral terms, so they include a specific description of the behavior to be performed and the conditions under which the student will be expected to perform that behavior.

At least two objectives must be written for each annual goal. The objectives should be logically sequenced and stated in a simple and direct manner. IEP participants may sequence objectives by behavior, condition, or criteria and state the intended outcomes in terms that permit measurement and assessment of the student's performance.

The analogy of planning a trip might help clarify the difference between short-term objectives and daily instructional objectives. When planning a trip, voyagers know their starting point, Los Angeles (present level of performance) and choose their destination, New York City (annual goal). They might next decide the main legs of the journey, such as Denver, Chicago, and Cleveland. These main segments represent short-term objectives. Instructional objectives could be represented by each and every town they pass through on the way to each of the major cities, Denver, Chicago, and Cleveland.

Another analogy for the relationship among current level of performance, annual goals, and short-term objectives in IEPs is the process of learning to ride a bicycle. Unlike the analogy of taking a trip, learning to ride a bicycle involves several skills (objectives) which must occur concurrently.

The present level of performance is no ability to ride a bicycle. The goal is to learn to ride the bicycle. The short-term objectives include:

- learn to mount the bicycle while advancing it in a forward motion,
- learn to steer the handle bars to assist in balancing,
- learn to move the pedals in a circular motion,
- learn to land on feet when the bicycle tips too far for recovery, and
- learn to depress both left and right hand brakes simultaneously and without pedaling to stop the bicycle.

The following examples of short-term objective statements are related to the annual goals stated above. Each objective begins with a condition followed by the behavior. The behavior is observable and measurable. Words and phrases such as *organize*, *review*, *indicate*, *explain*, *correctly identify*, *describe*, *complete*, and *construct* define measurable actions.

<b>Reading</b>	<b>Behavior</b>	<b>Transition</b>
With no assistance, the student will apply steps for a text-book scanning strategy in content areas to answer questions in three subject areas.	With a monthly check-up, the student will maintain a written record of all assignments given in three classes.	With no more than two prompts per day, the student will complete school or work tasks according to directions and proceed to the next task, or request a new task if necessary.

### Objective Criteria and Evaluation Procedures and Schedules

Although the minimum requirement for reviewing an IEP is on an annual basis, short-term objectives are evaluated according to a more frequent schedule determined at the IEP meeting. Participants of the meeting must write appropriate objective criteria, evaluation procedures, and schedules for determining whether the student is achieving each of the short-term objectives.

Objective criteria are quantitative measures—percentage of overall instruction, number of times, amount of time per day, number of trials—of the level of performance acceptable as indicators of successful attainment of the objective. Quantitative measure means that a student's behavior or performance must be able to be counted or quantified.

Evaluation procedures are data collection measures that describe how the teacher will determine that the criteria have been met. Examples include charting, reviewing of demerit list, testing, or keeping of a daily log. It is essential that the evaluation procedure match the objective criteria.

For example, it would make sense to evaluate time on task with a duration recording during a teacher observation; it would not make sense to evaluate this behavior by a test. One should note that teacher observation is only *part* of a procedure. It requires additional documentation, such as charting and anecdotal records.

Schedules for evaluation will indicate how often or when each objective will be evaluated: weekly, monthly, or quarterly. A specific date is also appropriate. It is important to evaluate and document according to the selected schedule.

The following examples of objective criteria correlate with the short-term objectives written above.

<b>Reading</b>	<b>Behavior</b>	<b>Transition</b>
condition ... <i>With no assistance,</i>	condition ... <i>With a monthly check up,</i>	condition ... <i>With no more than two prompts per day,</i>
behavior ..... <i>the student will apply</i>	behavior .... <i>the student will conduct</i>	behavior .... <i>the student will maintain</i>
criteria ..... <i>with 80 percent accuracy</i>	criteria ..... <i>with 100 percent accuracy</i>	criteria ..... <i>in four out of five opportunities</i>
procedure .. <i>a homework review</i>	procedure .. <i>a review of the record.</i>	procedure .. <i>a performance chart</i>
schedule .... <i>on a weekly basis.</i>	schedule .... <i>(monthly implied)</i>	schedule .... <i>on a weekly basis.</i>

#### Statement of Specific Special Education and Related Services

A statement of specific special education and related services that the school district provides to the student requires a list of program names (not individual teachers) and names of related services (not individual service providers). For example, the statement should read "learning disabilities programming" instead of "Ms. Karen Smith, LD teacher," or "school counseling" instead of "Mr. George Jones, counselor," or "learning disability programming including modifications in regular education" instead of "Jane Washington, regular education teacher." It is here that the district commits the specific programming options, related services, and the amount of each to the student's program.

The amount of each service, whether measured in an amount of time or another form, must be appropriate to the specific service. It must also be clear to all involved in the development and implementation of the IEP, especially the parents. The statement about the *amount* of special education refers to the specially designed instructional *service* the student receives. This includes direct special education instruction, and supplementary aids and services including modifications, monitoring, and consultation, which should be identified on the IEP. The amount of special education does not refer to the physical environment where the district offers the service. Special education services, whether offered in the regular education environment or in a separate environment, are counted toward the amount of special education. The time teachers spend adapting materials does not count toward the specified amount, but the time during which the student benefits from the adapted materials should count toward that time.

One example for calculating the amount of special education would be a fifth grade student who reads at the second grade level and who is placed in regular education for reading. During the daily 90 minute reading block, the student participates in class discussion and activities approximately 40 minutes. The LD teacher provides 20 minutes of direct reading instruction and up to 30 minutes of supportive instruction. In addition, the LD teacher consults with the regular classroom teacher on how to modify the lesson for this student and maximize the student's participation with non-disabled peers. The amount of special education received by this student is 90 minutes a day.

In this case, the environment did not affect the amount of special education this student receives. Had the student been placed in a separate classroom for specially designed reading instruction, the student's needs, and therefore the IEP, would have dictated the same 90 minutes. The content and delivery might have differed, but the service remains a special education (in this case, LD) service.

Related services are those necessary to help the student benefit from special education. Some examples of related services are occupational therapy (OT), physical therapy (PT), transportation, counseling services, social work services, rehabilitation counseling services, and therapeutic recreation. This list is not inclusive because the needs of the individual student determine the related services to be provided. Please note that OT and PT are the only related services that require the inclusion on the M-team of persons qualified to determine those needs. The other related services may be provided if identified on the IEP. In other words, if occupational or physical therapy services were not recommended by the M-team, these services cannot be considered for inclusion in the IEP.

#### Extent of Participation in Regular Education Classes

The IEP must include a statement of the extent to which a student will participate in regular education classes.

The extent of participation in regular education classes also refers to the environment in which the student is receiving an education. More specifically, it refers to when or what parts of the day the student is in the regular education environment regardless of whether or not the district provides special education or related services within that environment. One way to indicate the extent of participation in regular education is to list the specific regular education classes that the child will attend. Other ways include the amount of time, or the percentage of time. The selection of the method used to report the statements is based on individual student needs.

#### Projected Initiation of Services and Anticipated Duration

The projected initiation of services and the anticipated duration of the services cannot exceed 12 months. The IEP committee can write these dates using the first and last days of the school year for which the plan is written. Or, if the plan is written during the year, on January 5 perhaps, a 12-month period would be from January 5 of the current year to January 5 of the next year. When choosing this option, IEP participants must be certain to exclude those days and months that school is not in session.

Occasionally questions arise regarding the provision of educational services to children with disabilities during the summer months. In such discussions, a distinction must be made between summer school and extended school year services.

*Extended school year services* refers to the school district's legal obligation to provide programming because an evaluation team and an appropriately designed IEP determined it necessary to meet the unique needs of the child. The IEP bases this determination on regression caused by any interruption in the education program, combined with the student's limited recoupment capacity. (For additional information, see the DPI's Exceptional Education Information Update Bulletin No. 84.5.)

*Summer school*, however, usually operates on a specific schedule and does not necessarily duplicate the academic or vocational education programs provided during the regular year. Programming for students with disabilities must be equivalent to that offered to students without disabilities. (For more information, see the DPI's Exceptional Education Information Update Bulletin No. 89.5.)

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### *Other Mandated Components*

**Interpretation** IDEA and Section 504 of the Rehabilitation Act of 1973 require the presence of other elements in the IEP document. The author of this book has chosen to present these requirements *within* this interpretation rather than as legislation.

In addition to the above mandates, the IEP participants must also discuss, plan for, and document three other components, modifications in physical and vocational educational programs, standardized test modifications or removal from testing, and justification for removal from regular education or regular education environment.

The need for specially designed physical or vocational education programs must be noted on the IEP. In addition, specially designed programs must have goals and objectives written for them.

The IEP also must note whether or not the student will participate in standardized testing such as third grade reading tests, competency based testing, or achievement testing. Indication should include whether the student may fully participate, participate with modifications, or not participate in any way. The Wisconsin DPI issued the following policy statement regarding the Third Grade Reading Test (TGRT):

Whenever possible, EEN students should be included in the TGRT . . . . A "blanket" policy to exclude all EEN children from testing would contradict the intent of Section 504 . . . . Since state and federal laws have bias for inclusion, the justification for children excluded from testing should be carefully considered and defensible.

Although no modifications may be made to the content of the test itself, there are modifications that can be made to the procedures for administering the test. The modifications that are allowable do not change the test, but allow the test-takers who have disabilities to show their true reading ability in spite of their handicap.

In addressing the issue of justification for removal of a student from regular education, educators must first assume that a student belongs in regular education classes (the least restrictive environment) unless the IEP documents that the student's educational needs require a different setting. Educators should also consider whether they can provide the special education services in the regular education environment with supplemental aids and services. If not, a statement of justification for removal from regular education or regular education environment must be written. This justification statement must document three areas that explain why removal is necessary:

**The nature and severity of the student's disability.** In documenting the nature and severity of the student's disability, the student's specific impairment (not handicapping condition) must be identified and clearly must be so significant as to prevent the attainment by the child of benefit from participating in the regular class with the use of supplementary aids and services.

**Characteristics of the regular education environment that necessitate the removal.** In addressing the characteristics of the regular education environment, documentation must relate to how specific modifications or adaptations could not be provided considering the resources that are reasonably accessible to the district.

**"Any potential harmful effects on the child or on the quality of services which he or she needs."** (34 CFR 300.552(d) and PI 11.06(1)(b).) Potential harmful effects may involve a combination of "removing" and of "not removing." The starting point is based in the assumption that the student will receive education in the regular class. From that point, educators must document harmful effects to the student and to the quality of services. These shall include (per comment in 34 CFR 300.552) harmful effects to "the education of other students."

Here is an example of a justification for removal from regular education with all three parts:

- (1) As a non-reader, this child requires direct and intensive instruction in decoding skills.
- (2) Reading instruction is not part of the seventh grade curriculum.
- (3) Without an individualized reading program that is remedial in nature, the student's reading deficit cannot be remediated.

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### *Review of the IEP*

#### **Legislation**

(5) REVIEW OF THE IEP. (a) At least annually a board shall review the IEP of each child with EEN who is a resident of the district. Whenever a board conducts a review of a child's IEP or wants to change a child's IEP it shall comply with this section.

(b) If a child is attending a private school and the private school is providing special education services to the child, the private school may conduct reviews of a child's IEP at the discretion of the board. A private school that conducts a review or that wants to change a child's IEP shall comply with the requirements

under this section. The board shall ensure that at any IEP meeting held by a private school, the parent and the board are represented and are involved in any decision made about the child's IEP. No changes may be made to the child's IEP unless they are approved by the parent and the board.

(c) A parent may request a board to conduct a review of his or her child's IEP. If a board agrees to conduct a review based on a

parent's request, it shall comply with the requirements under this section.

(d) If a participating agency fails to provide agreed-upon transition services contained in the IEP of a child with EEN, the board shall, as soon as possible, initiate a meeting for the purpose of identifying alternative strategies to meet the transition objectives and, if necessary, revising the child's IEP.

**Interpretation** The student's IEP must be reviewed at least annually. At any point during the year, a meeting to review the IEP can also be called. The procedures outlined in this section in regard to the process and the document must be followed. Any change made to the IEP requires an IEP meeting, and a subsequent placement notice.

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### *Purpose*

#### **Legislation**

(6) **PURPOSE OF AN IEP.** (a) A board shall provide special education and related services to a child consistent with the child's current IEP. A board may not provide special education

and related services to a child unless the child has a current IEP.

(b) An IEP is a commitment of resources to a child by a board. An IEP is not a guarantee that the goals and objectives found in the IEP will be achieved.

**Interpretation** The individualized education program is the essential element of IDEA. For special education no document is more significant to districts, agencies, administrators, teachers, parents and educational advocates, and students. The IEP represents a commitment of resources to the student in the form of specially designed instruction and related services. With this commitment, students with disabilities have access to a free and appropriate public education.

For preschool children ages three through five who have been determined eligible for special education and related services, the district may use an individualized family service plan (IFSP) to fulfill the requirement of developing an IEP. The IFSP must meet all the requirements of an IEP and be completed prior to providing special education and related services.

The IEP requires a student-centered process, driven by student, not system needs. IEPs should reflect special education's best thinking. Even though districts are not legally bound to meet the projected goals, they are legally bound to provide the services and specially designed instruction indicated on the IEP.

The IEP legal requirement includes the IEP meeting, at which parents and school personnel jointly make decisions about the student's educational program, and the document, which serves as a written record of the decisions reached at the meeting.

The IEP meeting and document have six functions.

1. The meeting serves as a communication vehicle between parents and school personnel. It provides an opportunity for equal participation in order to jointly make decisions about needs, services, and outcomes.

2. The IEP meeting provides an opportunity for resolving differences concerning the special educational needs of the student.

3. This process represents a commitment of district resources to enable the student to receive needed services.

4. It serves as a management tool by which special education and related services, appropriate to special learning needs, can be tracked.

5. Educators can use the meeting and document as compliance and monitoring tools to determine whether or not the student is actually receiving the free and appropriate education upon which parents and educators agreed.

6. As an evaluation device, they help to determine a student's progress toward projected outcomes.

Even though many disciplines may be represented at the IEP meeting (such as speech and language, learning disabilities, occupational therapy, and others), the committee writes only one IEP for each student. For example, a targeted area of need for a student may be communication. Only one communication goal is necessary even if several persons—a speech clinician, a learning disabilities teacher, and a regular education teacher—share responsibility for planning and carrying out the programming to meet that goal. Short-term objectives from each person involved are written and combined for that one goal.

The IEP is a systematic planning tool that builds on the decisions made by the multidisciplinary team (M-team). It provides the link between assessment and instruction and lays the groundwork for instruction.

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### *Notice and Hearings*

#### **Legislation**

(7) NOTICE AND HEARINGS. (a) Whenever a board refuses to initiate or change an IEP it shall send a written notice to the child's parent of its intent to refuse. The notice shall be sent within a reasonable period of time before the

refusal to take action and shall meet the requirements under s. PI 11.09(1).

(b) A parent may initiate a hearing under s. PI 11.10 whenever a board proposes or refuses to initiate or change his or her child's IEP.

**Interpretation** If parents request a school to make a change in their child's IEP, or to initiate an IEP meeting other than those required as part of the evaluation or annual review process, the school staff shall hold the meeting to review the IEP and make needed changes, or inform the parents of their reason for not doing so. If parents are unsatisfied with the school's response to their request, the parents may seek from the school a due process hearing in which an independent hearing officer reviews the requests of the parents and the responses of the school, and then issues a decision regarding an appropriate course of action or settlement of this disagreement. Either the parents or the school district may appeal the decision of the hearing officer. See PI 11.10 for additional information about hearings and PI 11.11 for information about appeals.

## Preventing Inappropriate Referrals of Language Minority Students to Special Education

Shernaz B. Garcia and Alba A. Ortiz. *New Focus: The National Clearinghouse for Bilingual Education*. 5 (June, 1988)

### Introduction

The reasons that students experience academic failure can be organized into three broad categories (adapted from Adelman, 1970). The first type of learning problem (Type I) occurs when students are in classroom environments which do not accommodate their individual differences or learning styles. For example, limited-English-proficient (LEP) students who need native language or English-as-a-second-language (ESL) instruction, but who are taught solely in English without any adaptation of the curricula, can be expected to experience academic difficulties. Other children have achievement difficulties (Type II), but must be served in the regular classroom because their problems cannot be attributed to handicapping conditions. A Type II student who has not learned to read due to excessive absences, for instance, can overcome these deficits when instruction is individualized, or when remediation programs are provided. Type III children, on the other hand, have major **disorders** which interfere with the teaching-learning process. Because they are handicapped, these students require special education instruction to prepare them to be successfully mainstreamed into regular classrooms and to assure that they achieve their maximum potential.

Failure to distinguish Types I and II from Type III learning problems results in the inappropriate referral of language minority students to special education and contributes to the disproportionate representation of these students in special education, particularly in classes for the learning disabled (Tucker, 1981; Ortiz and Yates, 1983; Cummins, 1984). Examination of characteristics of limited-English-proficient students in programs for the learning disabled (Cummins, 1984; Ortiz et al., 1985) and the speech and language handicapped (Ortiz, Garcia, Wheeler, and Maldonado-Colon, 1986) suggests that neither the data gathered as part of the referral and evaluation process

nor the decisions made using these data reflect that professionals adequately understand limited English proficiency, second language acquisition, cultural and other differences which mediate students' learning. These findings support a growing body of literature indicating that many students served in special education experience difficulties which are "pedagogically induced" (Cummins, 1984).

Some would argue that there is no harm in placing students who are already failing in the regular classroom into special education where they will get individualized instruction from teachers who are specially trained to remediate learning problems. Wilkinson and Ortiz (1986), however, found that after three years of special education placement, Hispanic students who were classified as learning disabled had actually lost ground. Their verbal and performance IQ scores were lower than they had been at initial entry into special education and their achievement scores were at essentially the same level as at entry. Neither regular education nor special education programs adequately served the academic needs of these language minority students, a situation which further underscores the need for prereferral intervention. Otherwise, Type I and II students will experience the stigma of being labeled as handicapped without significantly improving their educational status.

### *Using Teacher Assistance Teams for Prereferral Intervention*

To address issues of inappropriate referral and placement of minority children in special education, one must examine the *quality* of instruction provided in the mainstream and the *validity* of referral and assessment processes (Heller, Holtzman and Messick, 1982). Such examination can be routinely provided through the implementation of a prereferral intervention process in which teachers are helped to remediate students' difficulties in the context of

the regular classroom before a special education referral is considered. An effective prereferral process can help distinguish achievement difficulties that are associated with a failure to accommodate individual differences from problems that stem from handicapping conditions.

Chalfant and Pysh (1981) recommend the use of Teacher Assistance Teams (TAT), whereby committees comprised of regular classroom teachers elected by their peers facilitate **prereferral problem-solving**. The Teacher Assistance Team and the referring teacher meet together to discuss problems which are becoming apparent, brainstorm possible solutions, and develop an action plan which is then implemented by the referring teacher with the support of team members. The team conducts follow-up meetings to evaluate the effectiveness of the proposed interventions and to develop other instructional recommendations if necessary. It is the Teacher Assistance Team which ultimately decides whether the student should be referred to special education.

Unlike most special education *referral* committees, Teacher Assistance Teams **do not** involve special education personnel (e.g., special education teachers or psychologists), except when they are invited to serve as consultants to the committee. This committee structure emphasizes that the TAT is under the authority and is the responsibility of the **regular** education system. It is this authority which distinguishes the **prereferral** from the **referral** process. Although in practice referral committees are considered a regular education function, the involvement of special education personnel frequently overshadows this intent, making it easier to move students into special education. The failure of referral committees to serve as gatekeepers to special education is indicated by the high referral-to-assessment-to-placement rates (75-90 percent) reported in the literature (Reynolds, 1984).

There are several benefits to the use of Teacher Assistance Teams. Teachers are provided a day-to-day peer problem-solving unit

within their school building and thus do not have to experience long delays until external support can be provided (Chalfant, Pysh, and Moultrie, 1979). Moreover, a collaborative learning community is established since the team process actually provides continuous staff development focused on management of instruction and students for all persons involved. Finally, the use of TAT serves to reduce the number of inappropriate referrals to special education because most problems can be taken care of by regular education personnel.

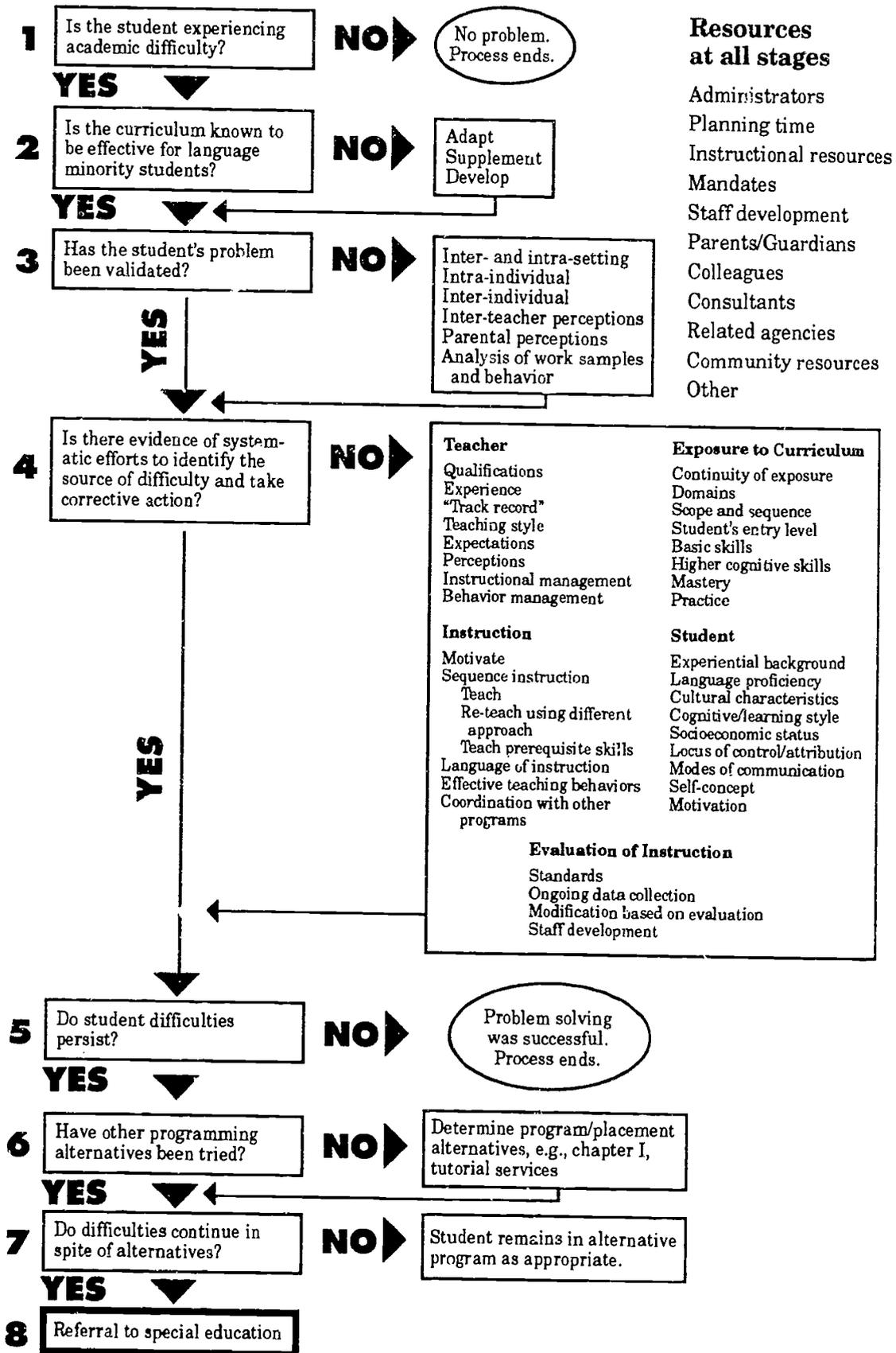
### *A Prereferral Model for Language Minority Students*

The key to success of Teacher Assistance Teams is the quality of the brainstorming and of the strategy selection process. These require that team members understand the characteristics of effective teaching and classroom and behavior management, and that they have an in-depth understanding of the student populations they serve so that instructional recommendations are appropriate to the needs and background characteristics of students. Moreover, team members must understand that a variety of factors can contribute to students' difficulties, including the characteristics of classrooms, programs and teachers.

The prereferral model presented in figure 1 provides valuable insights for classroom teachers and team members regarding potential sources of student difficulties and can help them distinguish Types I and II from Type III problems. The model attempts to build upon existing prereferral efforts (Graden, Casey and Christenson, 1985; Heller, Holtzman and Messick, 1982; Tucker, 1981) by raising a series of questions which must be addressed before a referral to special education is initiated. While many of the questions are appropriate for any student, an effort has been made to identify questions particularly germane to students in bilingual education and English-as-a-second-language programs.

Figure 1

**A Prereferral Process**



In the following sections, questions to be raised at each step of prereferral intervention are presented and follow-up questions which should be asked at each stage of the process are identified. Though by no means exhaustive, these follow-up questions are intended to represent issues that must be considered to more accurately identify the cause(s) of students' difficulties.

### **Step 1**

#### **Is the student experiencing academic difficulty?**

Because of the diversity of student backgrounds and the range of abilities typically found in regular classrooms, it is to be expected that some students will experience academic difficulty. However, it is important for teachers to understand that very few students experience difficulty because of a handicapping condition. National incidence figures indicate that only 10-12 percent of the student population is handicapped (Kaskowitz, 1977; Ortiz and Yates, 1983). Handicapping conditions include mental retardation, hearing and vision impairments, emotional disturbance, physical and health impairments, deaf-blindness, multiple handicaps, and specific learning disabilities. Linguistic, cultural, socioeconomic and other background differences are **not** considered handicapping conditions. As a matter of fact, the special education assessment process must clearly document that a student's learning difficulties are not the result of factors such as limited knowledge of English or lack of opportunities to learn. Consequently, prereferral interventions aimed at identifying the sources of the problem and improving the student's performance in the mainstream should be attempted **before** referral to special education is considered.

### **Step 2**

#### **Are the curricula and instructional materials known to be effective for language minority students?**

A beginning point in addressing the question of whether curricula and/or instructional materials are effective for second language learners is to examine achievement patterns in a district or on an individual campus. Representation of students at the high, middle, and low levels of standardized achievement scores should be proportional with the ethnic composition of the

educational unit being studied. If LEP students historically make the lowest achievement scores, or are overrepresented in special education, particularly in the category of learning disabilities, indications are that either the curriculum is ineffective for these students or that it has been poorly implemented. The curricula and instructional materials should be reviewed to determine whether they present both minority and majority perspectives and contributions and to determine whether they are relevant to students' language and culture. If student failure can be attributed to the use of inappropriate curricula or to ineffective instructional materials, then referrals to special education are unwarranted. Efforts, instead, should focus on modifying or creating more effective instructional programs.

#### *Program Development and Adaptation*

Special language programs exemplify the program development phase suggested by the prereferral model. The recognition that limited-English-proficient students cannot learn if they do not understand or speak the language of instruction led to the development of bilingual education and English-as-a-second-language programs. Less recognized, perhaps, is that regular classroom teachers must also adapt the curriculum and instruction for language minority students who do not qualify for special language programs and for students who have been exited from bilingual education or ESL. Although these students have good conversational English skills, many do not have the cognitive academic language skills (Cummins, 1984) needed to handle the language used by teachers in instruction and that is found in textbooks. Rather than treat these language minority students as though they were native speakers of English, teachers must incorporate language development activities into the curriculum to help students expand and refine their English language skills to a level commensurate with English-speaking peers. Language development programs are also important for students from lower socioeconomic status environments who have intact language skills for the purposes of communication at home and in their community, but because of differences in experiences do not have language skills, even in their primary language, which match the linguistic demands of the bilingual/ESL classroom.

Unless these language skills are taught, such students will be predisposed to school failure.

### Step 3

#### Has the problem been validated?

Identification of a student "problem" typically involves a judgment that the behavior is deviant from the norm. In the case of language minority students, the norm or reference group must represent the child's linguistic and cultural community. Several factors must be considered before the conclusion that behavior is abnormal can be validated, including observation and data collection in the following areas (Tucker, 1981):

1. *Inter- and intra-setting comparisons* to measure the extent to which the perceived problem is manifested across different occasions and settings.
2. *Inter-individual comparisons* must also be made to assess whether the perceived problem behaviors differ from those of other students in the class. The cultural, linguistic, socioeconomic and other relevant characteristics of the comparison group must be similar to those of the target student.
3. *Inter-teacher perceptions* to identify any teacher- or setting-specific problems that may exist, as is the case when similar problems fail to be noted by the student's other teachers.
4. *Parental perceptions* to determine whether parents confirm the school's perceptions. In such cases it is more likely that a problem exists.
5. *Analysis of student work samples and behavior* to determine the specific nature of the perceived problem. The problem should be described in precise, measurable terms, rather than using broad, general descriptors such as "below grade level in math," "cannot read well," or "has a short attention span." Work samples and behavioral analyses can also help develop hypotheses about the source of the difficulty. Is the student experiencing difficulty with division because she/he cannot multiply? Does the student fail to meet expectations for classroom behavior because the norms are different from those of his home or community? Work samples are particularly important for students in bilingual education programs in that they serve to verify, or question, results obtained from

standardized achievement tests which do not usually include representative samples of ethnic or language minority groups and which do not measure native language skills or achievement.

### Step 4

#### Is there evidence of systematic efforts to identify the source of difficulty and to take corrective action?

Since failure itself is a multi-faceted phenomenon, it is likely that the solution, too, will involve more than one aspect of the child's school experience. Solutions must be approached from various perspectives, to include teacher-, student-, curriculum- and instruction-related factors. Thus, in some instances, corrective actions include professional development and training for teachers; in other cases, the student may have to be taught prerequisite skills; in still other situations, a redirection of curricula and evaluation of instructional programs may be required.

#### Teacher Characteristics

Teachers may not possess the knowledge, skills and experience necessary to effectively meet the needs of students from diverse cultural, linguistic and socioeconomic backgrounds. When teacher and student characteristics differ along any or all of these dimensions, the potential for conflict and failure increases considerably. According to Gay (1981), such differences are often manifested as conflicts which are *substantive* (e.g., disagreement over educational goals), *procedural* (e.g., mismatch of teaching and learning styles) or *interpersonal* (e.g., culturally relevant behaviors interpreted as behavior "problems"). All three conditions affect teaching effectiveness and a student's ability to profit from instruction. It is, therefore, essential to examine the effectiveness of instruction, including the teacher's qualifications, experience, and teaching history, during the prereferral process. Examples of questions to be asked about teacher-related variables are given in figure 2.

**Teaching style.** Teachers are predisposed to teach in ways that correspond to their own learning styles (Ramirez and Castañeda, 1974). This poses few difficulties for students whose learning styles correspond to the teacher's

teaching style, but can be devastating for those whose styles are incompatible with the instructional approaches being used. Teachers can maximize learning by using a variety of techniques when they deliver instruction thus giving *all* students the opportunity to utilize their own modality preferences or cognitive styles. This can be achieved by the use of multi-sensory teaching aids, learning centers where students can learn material in a variety of ways, diversified grouping patterns, variations in reinforcement systems, and so forth. Additionally, students can be **taught** to use alternative learning styles thus increasing their chances of being successful, regardless of task conditions.

#### **Teacher Expectations and Perceptions.**

Teachers sometimes judge students' competence on the basis of race, sex, socioeconomic, linguistic and cultural differences, rather than on actual abilities (Bergen and Smith, 1966; Jackson and Cosca, 1974; Rist, 1970; Ysseldyke, Algozzine, Richey, and Graden, 1982). Research on teacher expectations (Good and Brophy, 1973) further suggests that teachers differentially interact with students for whom they hold low expectations. For example, they wait less time for students to respond, offer fewer opportunities to learn, focus on student behavior and discipline rather than academic work, reinforce inappropriate behaviors, seat low expectation students further away and call on them less frequently. Differential behaviors have also been noted in the treatment of boys and girls. Teachers with traditional sex role stereotypes may do a task for girls but give boys

extended directions to complete the activity, interpret girls' silence as ignorance versus interpreting boys' silence as evidence of thought and reflection, and provide girls with less feedback, positive or negative, than boys (Sadker and Sadker, 1982). As the quality of instruction is diminished over time, for specific groups of students this alone could explain differences in achievement levels. Patterns of teacher-pupil interactions should be analyzed to determine whether they facilitate or hinder student performance. Additionally, teachers' expectations should be evaluated to ensure that they are neither too high nor too low, since student frustration and failure can occur under either condition.

#### *Student Characteristics*

The complexity of providing appropriate instructional opportunities is immediately apparent when one considers the diversity of characteristics among language minority students. Those characteristics discussed in the following sections (and see figure 3) serve only to suggest the range of student variables which must be considered in planning instruction. A comprehensive description of background and experiences is required to make instruction uniquely appropriate to the student. The prereferral process should verify that the teacher has been able to tailor instruction to the needs of the student in question. Examples of teacher ability to accommodate cultural and linguistic diversity are also presented in figure 2.

## Teacher Variables

### *Experiential Background*

- Does the teacher have the training and experience to work effectively with multicultural populations?
- What resources has the teacher utilized in attempting to resolve the problem?
  - district resources (instructional supervisors, inservice training, media and materials)
  - volunteers
  - community resources
  - colleagues
  - external consultants
  - professional associations

### *Culture*

- Has the teacher gathered cultural information specific to the student and his/her family?
  - native/traditional versus immigrant group
  - parent interviews
  - student interviews
  - home visits
- Does the teacher incorporate aspects of the student's culture into the curriculum?
  - pluralistic goals, perspectives
  - integrating information across subject areas versus isolating units or presenting fragmented bits of information around holidays, festivals, etc.
  - accurate representation of culture and contributions of the group

### *Language Proficiency*

- Are the teacher's language skills adequate to deliver instruction in the student's native language?
- If the student is not in bilingual education, what resources have been utilized to provide native language support?
- Is the teacher adequately trained to provide dual language instruction? English-as-a-second-language intervention?
- Were the student's linguistic characteristics addressed by the teacher in planning instruction?
  - Comprehensible input is provided.
  - Focus of instruction is on meaning rather than error correction.
  - There are opportunities for English language acquisition.

### *Teaching Style / Learning Style*

- Is the teacher aware of his/her own preferred teaching style?
- Is the teacher aware of the student's preferred learning style?
- Does the teacher use a variety of styles to accommodate various learning styles of students? Is the student's style addressed?

### *Expectations / Perceptions*

- What are the teacher's perceptions of the student?
- Are expectations and level of instruction geared to higher levels of thinking?
- How does the teacher view cultural diversity in the classroom?
- How do these views influence expectations as well as instructional planning?

## Student Variables

### Experiential Background

- Are there any factors in the student's school history which may be related to the current difficulty?
  - attendance/mobility
  - opportunities to learn
  - program placement(s)
  - quality of prior instruction
- Are there any variables related to family history which may have affected school performance?
  - lifestyle
  - length of residence in the U.S.
  - stress (e.g., poverty, lack of emotional support)
- Are there any variables related to the student's medical history which may have affected school performance?
  - vision
  - hearing
  - illness
  - nutrition
  - trauma or injury

### Culture

- How is the student's cultural background different from the culture of the school and larger society? (Mattes and Omark, 1984; Saville-Troike, 1978)
  - family (family size and structure, roles, responsibilities, expectations)
  - aspirations (success, goals)
  - language and communication (rules for adult, adult-child, child-child communication, language use at home, non-verbal communication)
  - religion (dietary restrictions, role expectations)
  - traditions and history (contact with homeland, reason for immigration)
  - decorum and discipline (standards for acceptable behavior)
- To what extent are the student's characteristics representative of the larger group?
  - continuum of culture (traditional, dualistic, atraditional [Ramirez and Castañeda, 1974])
  - degree of acculturation or assimilation
- Is the student able to function successfully in more than one cultural setting?
- Is the student's behavior culturally appropriate?

### Language Proficiency

- Which is the student's dominant language? Which is the preferred?
  - settings (school, playground, home, church, etc.)
  - topics (academic subjects, day-to-day interactions)
  - speakers (parents, teachers, siblings, peers, etc.)
  - aspects of each language (syntax, vocabulary, phonology, use)
  - expressive vs. receptive
- What is the student's level of proficiency in the primary language and in English? (Cummins, 1984)
  - interpersonal communication skills
  - cognitive/academic literacy-related skills

- Are the styles of verbal interaction used in the primary language different from those most valued at school, in English? (Heath, 1986)
  - label quests (e.g., what's this? who?)
  - meaning quests (adult infers for child, interprets or asks for explanation)
  - accounts (generated by teller, information new to listener; e.g., show and tell, creative writing)
  - eventcasts (running narrative on events as they unfold, or forecast of events in preparation)
  - stories
- If so, has the student been exposed to those that are unfamiliar to him/her?
- What is the extent and nature of exposure to each language?
  - What language(s) do the parents speak to each other?
  - What language(s) do the parents speak to the child?
  - What language(s) do the children use with each other?
  - What television programs are seen in each language?
  - Are stories read to the child? In what language(s)?
- Are student behaviors characteristic of second language acquisition?
  - What types of language intervention has the student received?
    - bilingual vs. monolingual instruction
    - language development, enrichment, remediation
    - additive vs. subtractive bilingualism (transition versus maintenance)

### Learning Style

- Does the student's learning style require curricular/instructional accommodation?
  - perceptual style differences (e.g., visual vs. auditory learner)
  - cognitive style differences (e.g., inductive vs. deductive thinking)
  - preferred style of participation (e.g., teacher vs. student directed, small vs. large group)
- If so, were these characteristics accommodated, or were alternative styles taught?

### Motivational Influences

- Is the student's self-concept enhanced by school experiences?
  - school environment communicates respect for culture and language
  - student experiences academic and social success
- Is schooling perceived as relevant and necessary for success in the student's family and community?
  - aspirations
  - realistic expectations based on community experience
  - culturally different criteria for success
  - education perceived by the community as a tool for assimilation

**Language Proficiency.** There is wide diversity in the language characteristics of LEP students: diversity which at one extreme is descriptive of individuals reared in communities where the primary language is Spanish and at the other extreme characteristic of students reared in environments where the primary language is English. Determining the point on the language continuum which is most characteristic of students' first and second language skills is important to choosing the language of instruction (Ortiz, 1984). Language evaluations should produce data which describe the child's interpersonal communication skills and should emphasize analysis of English pragmatic skills, rather than structural accuracy (e.g., correctness of phonology, syntax, grammar). A focus on pragmatic skills is important because LEP students will make numerous errors on the surface forms of English. Teachers may inaccurately conclude that these errors suggest a possible language disability rather than that they verify the student's LEP status.

Critical to distinguishing learning disabilities from linguistic differences is the assessment of a child's academic language proficiency (Cummins, 1984). In addition to evaluating interpersonal communication skills, assessments should also measure the literacy-related aspects of language. Procedures which capture whether a child understands teacher-talk (e.g., tests of dictation or story retelling) and whether she/he can handle the language found in texts (e.g., cloze procedures or comprehension checks which tap evaluation or inferential skills) are recommended. Unless these skills are measured, teachers may attribute low achievement to learning disabilities when they may, in fact, be related to lack of academic language proficiency. Frequently, students at greatest risk of being misdiagnosed as handicapped are those who have received ESL instruction long enough to acquire basic interpersonal communication skills (approximately 1-2 years), but who need more time to develop academic language proficiency (approximately 5-7 years).

**Culture.** Understanding cultural characteristics is an important aspect of distinguishing differences from handicapping conditions. While some behaviors do not conform to the desired or expected behaviors of the majority society, they may, nonetheless, be normal given a student's ethnic or cultural group. Such be-

haviors are best characterized as **differences** rather than handicapping conditions. Educators must learn as much as possible about diversity within cultures, and about the contemporary culture of students, so they can create learning environments and curricula which are uniquely compatible with student characteristics, with expectations and desires of parents, and with school and community norms.

**Socioeconomic Status.** Developmental patterns of children from poverty environments differ from those of middle class students. When children's experiences do not match those expected by teachers and schools, teachers may attribute school problems to "deficient" environments and may lower their expectations for student success (Ortiz and Yates, 1984). Unfortunately, teachers sometimes fail to recognize that economic differences affect cognitive and learning styles, causing children to respond in different ways to instruction. For example, children from lower socioeconomic backgrounds may have difficulty processing information or profiting from instruction presented from a framework of independence and intrinsic motivation, if they fail to perceive their own effort as an important cause of success or failure. These students will not be successful unless they are taught using strategies compatible with their own cognitive orientations and/or until they are taught "learning to learn" strategies (e.g., setting goals, planning for goal attainment, sequencing behavior, and intrinsic motivation).

#### *Exposure to the Curriculum*

The central questions to be answered in determining whether children have had sufficient exposure to the curriculum are whether they have been taught the subject or skill and/or whether this instruction has been interrupted. Students experience discontinuity of instruction for a variety of reasons, including having to stay home to take care of younger brothers and sisters in family emergencies, fatigue because they work late hours to help support the family, or simply because they are experiencing so many school-related problems that avoiding school is a way of relieving the pain of failure. These interruptions of schooling negatively affect academic achievement and, if not addressed in a timely fashion, can have cumulative effects devastating to future success. Unless teachers provide ways for underachieving students to

catch up with peers, learning problems which develop are more likely to be associated with the lack of opportunity to learn, rather than with handicapping conditions. Filling in instructional gaps requires that teachers understand skill domains (e.g., that reading requires that children have an adequate language foundation and that they master both word recognition and comprehension skills), so they can assess each child's entry level skills and sequence instruction accordingly. Figure 4 suggests areas which should be explored at this stage.

Figure 4

### Exposure to the Curriculum

- Were skills in question taught?
- Did student receive adequate exposure to curriculum?
  - in his/her dominant language
  - sufficient practice to achieve mastery
- Was instruction sensitive to student's level of performance?
  - instructional, frustrational, independent levels
  - higher level cognitive skills vs. basic skills
- Was adequate mastery of skills/concepts ensured prior to moving on to new material?

**Higher Cognitive Skills.** Cazden (1984) criticizes school effectiveness research because it places too much emphasis on the development of skills which are easily quantifiable (e.g., math activities in which answers can be judged as right or wrong) and virtually ignores instruction involving more complex, abstract concepts and development of critical thinking skills, the outcomes of which are oftentimes difficult to measure. Cummins (1984) concurs, indicating that the predominant instructional model, in regular and special education, is based on task analyses which structure learning in small, sequential steps: students may be able to complete each step but are sometimes unable to reconstruct the whole task because it has been stripped of meaning. Task analysis is antithetical, not only to higher order skill development, but in the case of LEP students, to the acquisition of English as a second language. Cummins recommends, instead, a reciprocal interaction model in which the teacher serves as a facilitator

of learning, focuses on higher order cognitive skills, and integrates language use and development into all aspects of curriculum content. Such a model is expected to produce more effective learners and may decrease the need for specialized intervention outside the mainstream. The prereferral process should describe the instructional model being utilized by the teacher to determine whether the approach, in and of itself, is maintaining low functioning levels and reinforcing marginal, semi-dependent behavior (Harth, 1982).

**Basic Skills.** Because special education referrals are usually concerned with mastery of basic skills, the prereferral process should document the extent and nature of prior instruction in these areas. Of particular interest is the language in which skills were initially taught. It is not uncommon for LEP students to be referred to special education on the basis of low English skills, even though their first schooling experiences were in bilingual education programs in which basic skills were taught in the native language (L1). For these students, a referral would be inappropriate until data such as the following are analyzed: (a) the child's English (L2) and native language proficiency, (b) informal assessment results describing level of basic skills functioning in L1 and L2, (c) information about when the transition to English language instruction occurred, and (d) whether the child was functioning adequately in the native language at the time of the transition. These data can help determine whether the child's problems are pedagogically induced as might be the case, for example, if English language instruction were begun before the child had adequately mastered basic skills in L1, or before she/he had acquired appropriate levels of English language proficiency.

**Mastery and Practice.** Sufficient time must be allocated for students to achieve subject or skill mastery and for skills practice. Students are sometimes engaged in independent practice activities before they have demonstrated adequate understanding of the task, and thus incorrect patterns or behaviors are reinforced as they work on their own. According to Rosenshine (1983), assuring adequate exposure to the curriculum requires that a child demonstrate mastery at a level of 95 to 100 percent accuracy. Berliner (1984) suggests that teachers check

students' understanding during lesson presentations and that pupils first participate in guided or controlled practice during which teachers monitor performance to be sure that students are working at high levels of accuracy. Only then should students be involved in independent, unsupervised activities. At the prereferential stages, data are gathered to describe adequacy of lesson presentations and whether the student has had sufficient time to master and practice skills. Evidence that the child received appropriate instruction, but did not profit from it, can later be used to justify a referral for a comprehensive assessment.

### *Instruction*

Before referring a student, teachers should carefully document adaptations of instruction and programs which have been attempted to improve performance in the mainstream. Adelman (1970) suggests that instruction be carefully sequenced as follows: (a) teach basic skills, subjects or concepts; (b) reteach skills or content using significantly different strategies or approaches for the benefit of students who fail to meet expected performance levels after initial instruction; and (c) refocus instruction on the teaching of prerequisite skills for students who continue to experience difficulty even after approaches and materials have been modified. Documentation of this teaching sequence is very helpful if the child fails to make adequate progress and is subsequently referred to special education. Referral committees will be able to judge whether the adaptations attempted were appropriate given the student's background characteristics. It is possible, for example, that a child will fail to learn to read, even after a teacher attempts several different reading approaches, because the child is being instructed in English but is not English proficient. In this case, the interventions would be judged inappropriate and other instructional alternatives would need to be recommended. Ultimately, if the child qualifies for special education services, information about prior instruction is invaluable to the development of individualized educational programs, because the types of interventions which work and those which have met with limited success are already clearly delineated. Figure 5 delineates types of questions to be asked about instruction.

Figure 5

### **Instruction**

- Does the learning environment promote intrinsic motivation?
  - relevant activities
  - incorporation of students' interests
  - addressing student needs
  - sensitivity to experiential background
- Does the teacher use alternative approaches when there is evidence of a learning difficulty?
  - teach
  - reteach using significantly different approaches
  - teach prerequisite skills
- Does the teacher use strategies that are known to be effective for language minority students?
  - native language and ESL instruction
  - genuine dialogue with students
  - contextualized instruction
  - collaborative learning
  - self-regulated learning
- Does the teacher use current approaches to the teaching of ESL?
  - Total Physical Response Approach (Asher, 1979)
  - The Natural Approach (Terrell, 1983)
  - Sheltered English Teaching (Northcutt and Watson, 1986)
- Does the teacher use approaches to literacy development which focus on meaningful communication?
  - shared book experiences (Holdaway, 1979)
  - Graves' Writing Workshop (Graves, 1983)
  - language experience stories
  - dialogue journals (Staton, 1987)
  - journals

Instruction should be consistent with what is known about language acquisition and about the interrelationship between first and second language development. Some research literature (Cummins, 1984; Krashen, 1982) indicates that the native language may provide the foundation for acquiring English-as-a-second-language skills. Therefore, strong promotion of native language conceptual skills may be more effective in providing a basis for English literacy (Cummins, 1984). Conversely, a premature

shift to English-only instruction, may interrupt a natural developmental sequence and may interfere with intellectual and cognitive development. Teachers need to mediate instruction using both the first and the second language and integrate English development with subject matter instruction. Along with this, teachers may consider responding to and using cultural referents during instruction, respecting the values and norms of the home culture even as the norms of the majority culture are being taught (Tikunoff, 1985). Above all, teachers must communicate high expectations for students and a sense of efficacy in terms of their own ability to teach culturally and linguistically diverse students.

### *Evaluation of Instruction*

Obviously, any instructional program must involve a continuous monitoring system to determine whether goals and objectives are being met. In the classroom, evaluation is teacher-driven and requires that teachers continuously check student progress through daily quizzes, six-week examinations, or informal observations, for example, and that they provide feedback to students about academic progress. It does not help to return a student's spelling test or math assignment with answers marked wrong but no information as to why responses were incorrect and thus, no indication as to how performance can be improved. Simply marking answers as right or wrong does not clue the teacher as to how to modify instruction or plan subsequent lessons for students experiencing difficulty. A data-based approach involving simple, informal observation and analysis of student work samples is more effective in increasing student achievement (Zigmond and Miller, 1986). For limited-English-proficient students, data must describe the child's functioning levels in English and the native language.

The discussions in the preceding sections are not exhaustive, but are simply designed to highlight that learning problems occur for a variety of reasons. These reasons include a lack of teacher preparation in the instruction of multicultural populations, failure to provide instruction, instruction that is not consistent with entry level skills or is inappropriately sequenced, and/or the absence of a system for evaluating and modifying instruction as needed. Conse-

quently, there will be instances when intervention will be focused on teachers and programs, rather than on students.

### **Step 5**

#### **Do student difficulties persist?**

If, after evidence is provided that systematic efforts were made to identify the source of difficulty and to take corrective action, student difficulties persist, the next step in the process is to explore other programming alternatives within the mainstream.

### **Step 6**

#### **Have other programming alternatives been tried?**

If the student's problem cannot be resolved by the bilingual education or ESL teacher, it may be possible for students to be served through compensatory education programs which provide remedial instruction (i.e., Chapter 1, migrant education, or tutorial programs). If such placements are not readily available, referral to special education can become a "trigger" response when teachers are unable to improve students' achievement.

Effective use of compensatory programs as an alternative to referral requires that teachers understand the purpose of these alternative programs and that they be familiar with eligibility criteria for placement (which students are served by which program). Procedures to coordinate consideration for eligibility across such programs should be developed. For example, when tests and other measures used to determine eligibility vary from program to program, data gathered during assessment for one program may not necessarily provide information that would qualify a student for another, more appropriate, service. Such parallel yet separate processes tend to hinder timely services to students who need them, and increase the burden of testing for both assessment personnel and students.

Finally, it is important that alternative programs be supplemental to, rather than a replacement for, regular classroom instruction and that appropriateness of instruction provided by such services is evaluated as carefully as was instruction in the classroom (see Step 4). Unless these issues are addressed, mis-

placements in special education can continue to occur despite the availability of these options (Garcia, 1984).

### Step 7

#### Do difficulties continue in spite of alternatives?

If mainstream alternatives prove to be of no avail, then a referral to special education is appropriate. The evidence most critical to determining eligibility will accompany the referral, i.e., verification that (a) the school's curriculum is appropriate; (b) the child's problems are documented across settings and personnel, not only in school, but also at home; (c) difficulties are present both in the native language and in English; (d) the child has been taught but has not made satisfactory progress; (e) the teacher has the qualifications and experience to effectively teach the student; and (f) instruction has been continuous, appropriately sequenced, and has included teaching of skills prerequisite to success. A child who does not learn after this type of systematic, quality intervention is a likely candidate for special education. The referral indicates that a decision has been reached that the child cannot be served by regular education programs alone and that she/he may be handicapped. A comprehensive assessment is requested to determine the nature of the handicapping condition.

While at first glance the model may seem overwhelming, several factors should be kept in mind. First of all, the model suggests the characteristics of effective instruction and thus can be used proactively to develop classroom environments conducive to student success. Moreover, it pinpoints variables which influence student performance, making it easier for teachers to diagnose causes of problems and to attempt solutions. When interventions attempted by teachers fail to yield improved performance, Teacher Assistance Teams provide a relatively simple and cost-effective vehicle for providing additional support to regular classroom teachers in the problem-solving process.

### Summary

Prereferral intervention should be a formal process, governed by a clearly recognizable set of procedures, accepted and followed by all

personnel on a district or campus-wide basis, and located under the jurisdiction of regular education. There are major benefits to be gained from the successful implementation of such a process. Serving students in the mainstream is more cost effective than placement in special education, particularly if the student is underachieving, but not handicapped. More importantly, perhaps, are the long-term benefits for students themselves who will have a greater chance of achieving their social, political, and economic potential because they are provided an appropriate education. Unless dropout rates among LEP students are decreased and academic achievement of these students is improved, the loss of earning power, and the concomitant drain on society's resources, will continue to be astronomical. Development of prereferral interventions, in which the major goal is to improve the effectiveness of regular education for language minority students, seems a very cost-effective investment in the future.

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**Exceptional Education Information Update—  
Bulletin No. 93.1**

**DATE:** February 1993

**TO:** District Administrators, CESA Administrators, CHCEB Administrators, Directors of Special Education, Special Education Program Designees, Directors of Pupil Services, Directors of Instruction, Local Vocational Education Coordinators, and Other Interested Parties

**FROM:** Juanita S. Pawlisch, Ph.D., Assistant Superintendent  
Division for Handicapped Children and Pupil Services

**SUBJECT:** New IEP Transition Planning and Service Requirements

This bulletin is to alert all secondary administrators, educators, and pupil services staff of new federal regulations that affect current implementation of the Individuals with Disabilities Education Act (IDEA). The revised legislation requires significant involvement of high school interdisciplinary staff, community agency staff, and the individual student when planning and delivering transition services. **All** students with disabilities must receive these services through their individualized education program (IEP) by age 16. The department will be monitoring districts for their compliance with the new regulations and this bulletin will assist to clarify the requirements.

Students with disabilities specified in Subchapter V of Chapter 115, Wis. Stats. and IDEA amendments are "any person under the age of 21 years . . . with the following conditions . . . (who) may require educational services to supplement or replace regular education:

1. Orthopedic impairment,
2. Cognitive disability or other developmental disability,
3. Hearing handicap,
4. Visual handicap,
5. Speech or language handicap,
6. Emotional disturbance,
7. Learning disability.
8. Autism
9. Traumatic brain injury
10. Other health impairment."

As described in Exceptional Education Information Update Bulletin No. 91.6, amendments to IDEA, formerly known as the Education of the Handicapped Act (EHA), took effect October 30, 1990, and require that **all** students with disabilities, at least by age 16, have transition services provided to them. The planning for the delivery of transition services to students with disabilities must occur through the IEP and include multi-disciplinary and multi-agency responsibilities and coordinated instruction, community experiences, employment objectives, and other post-school adult living objectives. The responsibility to provide appropriate transition services to students with disabilities is to be a shared responsibility among general educators, vocational educators, employment

specialists (including DVR), post-secondary educators, social service and mental health specialists, and special educators.

Federal rules to implement IDEA were announced September 29, 1992 and took effect November 13, 1992. Excerpts from those rules which affect the delivery of transition services are attached to this bulletin. In order to effectively implement these requirements, educators will need to reconceptualize the delivery of special education at the secondary level; school and community agencies' administration will need to change and develop transition policies; and school administration will need to provide leadership to ensure the inclusion of students with disabilities in all high school programs that will improve their successful transition from school to post-secondary education and training, employment, and independent living. The following numbered requirements are excerpts from the rules pertinent to transition:

1. Anytime the IEP committee considers transition services (as defined in the legislation), it **MUST**
  - make "when appropriate, a statement of the interagency responsibilities or linkages or both" for transition services, (20 USC 1401(a)(20))
  - "invite a representative of any other agency that is likely to be responsible for providing or paying for transition services" to the IEP meeting, (34 CFR 300.344(c)(1)(ii))
  - in the event that the agency does not attend, "take other steps to obtain the participation of the other agency in the planning of any transition services," and (34 CFR 300.344(c)(3))
  - invite the student to the meeting. (34 CFR 300.344(c)(1)(i))

Suggestions to implement this requirement:

Under IDEA, the school district is the agency responsible for initiating the multi-agency linkages and multi-disciplinary collaboration for transition services through the IEP process. In order to achieve this, districts will need to provide training opportunities to their staff that apprise them of existing community agencies and respective responsibilities for transition services. This is best accomplished through participation in other agencies' training programs, or by presentations to school staff from professionals from community agencies.

In order to effect multi-disciplinary and multi-agency collaboration in the IEP, it is necessary to develop at the administrative level, interdepartmental policies and interagency agreements that define the process, allocate the staff, and commit the time and resources to services. Practically speaking, a classroom teacher neither has the time to coordinate all the transition components of an individual student's IEP, or the authority to appoint colleagues and community agency staff to the IEP committee. Further, the school district cannot commit the resources of another community agency to assist the student in the transition process. The Department of Education foresaw this dilemma and addressed it in this comment:

The Secretary recognizes that LEAs do not have the authority to commit the resources of another agency. However, the SEA is responsible—through the use of interagency agreements required under 34 CFR 300.152, or other means—to ensure that services that would have been provided by other agencies will continue to be provided, either by those agencies, or by the LEA responsible for providing FAPE to the child. In accordance with 34 CFR 300.150, **States may not permit LEAs to use funds under this part to provide or pay for services that would have been paid for by a health or other agency pursuant to policy or practice but for the fact that these services are now included in a student's IEP . . . .** (emphasis added)

The following are suggestions for specific content of agreements:

- Role of local agency staff in IEP development
- Agency services for students still in school
- Agency eligibility qualifications for EEN students
- Process for contacting agency, referring students
- Funding issues, contracting
- Confidentiality protections
- Role of school in Individual Written Rehabilitation Plan, Individual Service Plan, and Individual Treatment Plan development
- Qualification process for Supported Employment for EEN students
- Qualification process for subminimum wage
- Age limitations
- Social Security Administration involvement
- Post-secondary education services for EEN students: application procedures, entrance tests, adaptations, financial planning assistance, recruitment of EEN students
- Commitment to support services
- Process for EEN students taking university/VTAE courses while still in high school
- Process for EEN students becoming apprentices
- Application of the Americans with Disabilities Act requirements to EEN students' programs, work-study, community involvement
- Transition process for EEN students in corrections, Child Caring Institutions, hospitals, and to and from community
- Job Training Partnership Act programs relationship to schools
- Process for student follow-up, and transition services evaluation

Students should be prepared for their participation at their IEP meeting through their special education program and should be invited to attend through a notice similar to the one their parents receive. Districts will need to provide students with disabilities a relevant career education program and a self-advocacy curriculum, which includes their rights under federal laws. Districts must prepare students to choose realistic transition goals in their own program development, and to demonstrate self-sufficiency and adult responsibility after high school.

2. When the IEP committee will be considering transition services (always by age 16), the parent must be notified of the fact and that their child will also be invited. (34 CFR 300.345(b)(2)(ii))

Suggestions to implement this requirement:

Districts need to add to their parent notices of IEP meetings that transition services will be discussed, specific community agencies will be invited to attend, and their child will be invited to attend.

3. The "coordinated set of activities" for transition services which the IEP committee develops must "be based on the individual student's needs, taking into account the student's preferences and interests . . . ." (34 CFR 300.18(b)(1))

Suggestions to implement this requirement:

In order for students with disabilities to make realistic career choices, express their preferences and interests, and be prepared for post-secondary education, adult living, and employment as required, they need to have been included, according to the IEP committee's individually tailored program, in a relevant developmental career education program K-12 (Wisconsin Developmental Guidance Model) and an Education for Employment program which are mandated for all students in Wisconsin.

Unfortunately, many students with disabilities have not been included in these programs. District policies should ensure that by age 16, EEN students receive career education which includes all the mandated content and prepares them for the programming decisions they must make.

The rules require inviting the student to express her/his preferences at the IEP meeting. The IEP committee must take into account the student's preferences. If the student does not attend the IEP meeting, the district must "take other steps to ensure that the student's preferences and interests are considered." (34 CFR 300.344(c)(2))

4. The transition services the IEP committee designs **MUST** include "needed activities in the areas of:
- instruction,
  - community experiences,
  - the development of employment objectives,
  - the development of other post-school adult living objectives,
  - if appropriate, acquisition of daily living skills,
  - if appropriate, functional vocational evaluation,"
- or document why not.** (emphasis added) (34 CFR 300.18(b)(2) and 300.346(b))

Suggestions to implement this requirement:

**A. Instruction—Suggested Curricular Areas**

1. Financial Management
2. Career and Vocational Education
3. College Preparatory
4. Daily Living Skills (When Appropriate)
5. Recreation, Leisure Skills
6. Transportation, Mobility
7. Self-advocacy
8. Job Finding
9. Personal/Family Relationships

**B. Community Experiences—Suggested Activities**

1. Work-study
2. Youth Apprenticeships
3. Job Shadowing
4. Work Site Visitations and Presentations
5. Public Transportation Experiences
6. Shopping Experiences
7. Recreation Experiences, Clubs
8. College and Technical School Experiences
9. Apartment/House Management Experiences (Maintenance, Financial, Domestic, Personal Skills)
10. Adult Service Agency Experiences
11. Volunteer Experiences—Youth Service
12. Child Care
13. Student Organizations

**C. Employment Objectives—Suggested Options**

1. Competitive Employment—No Support
2. Competitive Employment—On the Job Training
3. JTPA Programs
4. District Co-op Programs
5. Work-study

6. Youth Apprenticeships
  7. Junior Achievement
  8. Entrepreneurial Model
  9. Job Corps
  10. Supported Employment
  11. School Based Training
  12. Transitional or Time-Limited Employment Training
  13. Supported Job—Subminimum Wage (Approval through the Department of Industry, Labor, and Human Relations and U.S. Department of Labor)
  14. Supported Job—Targeted Jobs Tax Credit
  15. Enclave Model
  16. Mobile Work Crew
  17. Full-time/Part-time
  18. Job Sharing
  19. Job Creating
  20. Job Placement Services
  21. Job Matching
  22. Job Counseling
- D. Post-school Adult Living Objectives—Suggested Options**
1. Independent Living (No Need for Support)
  2. Independent Living (Time-Limited Support)
  3. Independent Living (Ongoing, But Infrequent Support)
  4. Independent Living (Daily Support)
  5. Supervised Apartment
  6. Group Home Living (Supervision)
  7. Group Home Living (Supervision and Training)
  8. Group Home Living (Skilled Nursing)
  9. With Roommate
  10. With Family or Relative
  11. Semi-independent Living Services
  12. Intermediate Care Facility (ICF)—On-going support
  13. Waivered Services
  14. Adult Foster Care
  15. Adult Nursing Home
  16. Long Term Support Services
  17. Community Options Program
  18. Family Support Program
- E. Daily Living Skills (When Appropriate)—Suggested Curricular Areas**
1. Self-advocacy, Assertiveness Training
  2. Parenting
  3. Community Resource Utilization
  4. Citizenship—Awareness, Participation
  5. Money Management
  6. Meal Preparation
  7. Housekeeping and Maintenance
  8. Self Care—Hygiene
  9. Recreation, Leisure
  10. Purchasing Food and Clothing
  11. Mental health
  12. Physical health

## F. **Functional Vocational Evaluation** (When Appropriate)

Another definition of "functional" assessment is the popular term, "authentic" assessment. For many students with disabilities, standardized vocational assessment, including interest inventories, are invalid, unreliable, and in some cases, discriminatory against the student's disability. In the arena of vocational assessment, the evaluation's purpose must be to improve the services and to facilitate the student's completion of a vocational education program. The assessment must focus on the interactions of the student with instructors, peers, and employers. Training needs, work demands, environments, and necessary adaptations are also key issues.

There is no magic recipe for a functional vocational assessment since it is based on the concept of measuring student performance on actual job tasks or vocational activities in a realistic, authentic environment. For those occupationally specific tasks, the assessment should be conducted by the vocational educator or employer. The functional vocational assessment should provide information about the student's preferences, behavior, learning style, need for assistive devices, initiative, communication needs, physical and mental endurance, medical status, transportation needs, specific work skills, and specific methods of training and instruction needed.

All assessment should be conducted within the context of the multi-disciplinary team (M-Team) evaluation and IEP; recorded in the "present levels of performance" or "evaluation" sections of the IEP document; utilized to measure student progress, appropriateness of program, and need for modifications in program to enhance student success; communicated to students to assist them to understand their strengths, limitations, the job market, and make career decisions; and be discussed with instructors, guidance counselors, employers and community service staff to provide necessary supports and adaptations for successful vocational experiences.

5. Rehabilitation counseling services are related services and must be provided by qualified personnel, when determined by the IEP committee as necessary for the student to benefit from special education, "in individual or group sessions that focus specifically on:
  - career development,
  - employment preparation,
  - achieving independence,
  - and integration into the workplace
  - and community, of a student with a disability." (34 CFR 300.16(b)(10))

Suggestions to implement this requirement:

In the comment section of the rules the Education Department states:

The Report of the House Committee on Education and Labor on Public Law 101-476 describes rehabilitation counseling as an important related service in special education, as well as an important transition service in preparing students with disabilities for employment or post-secondary education. In addition, the report states, "It is the intent of the Committee that rehabilitation

counseling . . . be provided to all students with disabilities for whom this service is necessary for the achievement of the individualized education program.'

Because 'rehabilitation counseling services' is a type of related service under 'counseling services' in part B, public agencies must provide that service to any student with a disability, if the IEP team determines that the service is required to assist the student to benefit from special education. As indicated in the comment that follows, rehabilitation counseling may be provided by existing LEA staff, if they are qualified under (the rules) to provide those services in areas appropriate to their disciplines.

The Secretary believes that existing school staff (e.g., prevocational counselors, work-study coordinators, or special education teachers), who are qualified . . . should be permitted to provide rehabilitation counseling services appropriate to their disciplines.

It is generally recommended that school districts view and utilize rehabilitation counseling in a manner similar to guidance counseling and school social work services. Rehabilitation counselors assigned to the school role should have caseloads determined by the extent of individual students' needs. The fiscal and administrative issues of which agency or party (school, DVR, or third party) is responsible for providing and/or funding rehabilitation counseling services may need to be addressed locally through formal interagency agreements.

6. Assistive technology devices and services **MUST** be provided if the IEP committee determines they are necessary. (34 CFR 300.308)

Suggestions to implement this requirement:

Assistive technology is an important rule because of the concomitant responsibilities of medical and rehabilitation agencies to fund, evaluate the need for, and provide assistive technology services and devices. The rule on assistive technology service specifically cites "coordinating . . . other . . . services with assistive technology devices, such as those associated with existing education and rehabilitation plans and programs," which is part of the transition process. (34 CFR 300.6(d))

The Department of Education's comments to this rule in part state:

The requirement in the (rule) limits the provision of assistive technology to educational relevancy—i.e., an assistive technology device or service is only required if it is determined, through the IEP process, to be

1. special education, as defined in (the rules),
2. a related service, as defined in (the rules), or
3. supplementary aids and services required to enable a child to be educated in the least restrictive environment.

The Secretary believes that the (rules) limit the provision of assistive technology devices and services to those situations in which they are required in order for a child to receive FAPE . . . .

Procedures for determining the need for assistive technology services . . . is . . . part of the individual evaluation of each child (M-Team), . . . done by qualified individuals . . . . IDEA funds . . . may be used to obtain the necessary expertise, and, if appropriate, to train existing school personnel.

**IDEA Rules, Corrections, and Appendixes (Interpretations)  
 Impacting Transition Services to Students With Disabilities  
 (Published September 29 and October 27, 1992)**

**300.17 Special education.**

(a)(1) As used in this part, the term "special education" means specially designed instruction, at no cost to the parents, to meet the unique needs of a child with a disability, including—

(i) Instruction conducted in the classroom, in the home, in hospitals and institutions, and in other settings; and

(ii) Instruction in physical education.

(2) The term includes speech pathology, or any other related service, if the service consists of specially designed instruction, at no cost to the parents, to meet the unique needs of a child with a disability, and is considered special education rather than a related service under State standards.

(3) The term also includes vocational education if it consists of specially designed instruction, at no cost to the parents, to meet the unique needs of a child with a disability.

(b) The terms in this definition are defined as follows:

(1) "At no cost" means that all specially designed instruction is provided without charge, but does not preclude incidental fees that are normally charged to nondisabled students or their parents as a part of the regular education program.

(2) "Physical education" is defined as follows:

(i) The term means the development of—

(A) Physical and motor fitness;

(B) Fundamental motor skills and patterns; and

(C) Skills in aquatics, dance, and individual and group games and sports (including intramural and lifetime sports).

(ii) The term includes special physical education, adaptive physical education, movement education, and motor development.

(3) Vocational education means organized educational programs that are directly related to the preparation of individuals for

paid or unpaid employment, or for additional preparation for a career requiring other than a baccalaureate or advanced degree.

**Note 1:** The definition of special education is a particularly important one under these regulations, since a child does not have a disability under this part unless he or she needs special education. (See the definition of children with disabilities in section 300.7.) The definition of related services (section 300.16) also depends on this definition, since a related service must be necessary for a child to benefit from special education. Therefore, if a child does not need special education, there can be no related services, and the child is not a child with a disability and is therefore not covered under the Act.

**Note 2:** The above definition of vocational education is taken from the Vocational Education Act of 1963, as amended by Public Law 94-482. Under that Act, "vocational education" includes industrial arts and consumer and homemaking education programs.

**300.18 Transition services.**

(a) As used in this part, "transition services" means a coordinated set of activities for a student, designed within an outcome-oriented process, that promotes movement from school to post-school activities, including post-secondary education, vocational training, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation.

(b) The coordinated set of activities described in paragraph (a) of this section must—

(1) Be based on the individual student's needs, taking into account the student's preferences and interests; and

(2) Include

(i) Instruction;

(ii) Community experiences;

(iii) The development of employment and other post-school adult living objectives; and

(iv) If appropriate, acquisition of daily living skills and functional vocational evaluation.

(Authority: 20 USC 1401(a)(19))

**Note:** Transition services for students with disabilities may be special education, if they are provided as specially designed instruction, or related services, if they are required to assist a student with a disability to benefit from special education. The list of activities in paragraph (b) is not intended to be exhaustive.

## Individualized Education Programs

### 300.344 Participants in meetings.

(a) *General.* The public agency shall ensure that each meeting includes the following participants:

(1) A representative of the public agency, other than the child's teacher, who is qualified to provide, or supervise the provision of, special education.

(2) The child's teacher.

(3) One or both of the child's parents subject to section 300.345.

(4) The child, if appropriate.

(5) Other individuals at the discretion of the parent or agency.

(b) *Evaluation personnel.* For a child with a disability who has been evaluated for the first time, the public agency shall ensure—

(1) That a member of the evaluation team participates in the meeting; or

(2) That the representative of the public agency, the child's teacher, or some other person is present at the meeting, who is knowledgeable about the evaluation procedures used with the child and is familiar with the results of the evaluation.

(c) *Transition services participants.*

(1) If a purpose of the meeting is the consideration of transition services for a student, the public agency shall invite—

(i) The student; and

(ii) A representative of any other agency that is likely to be responsible for providing or paying for transition services.

(2) If the student does not attend, the public agency shall take other steps to ensure that the student's preferences and interests are considered; and

(3) If an agency invited to send a representative to a meeting does not do so, the public agency shall take other steps to obtain the participation of the other agency in the planning of any transition services.

(Authority: 20 USC 1401(a)(19), (a)(20); 1412(2)(B), (4), (6); 1414(a)(5))

**Note 1:** In deciding which teacher will participate in meetings on a child's IEP, the agency may wish to consider the following possibilities:

(a) For a child with a disability who is receiving special education, the teacher could be the child's special education teacher. If the child's disability is a speech impairment, the teacher could be the speech-language pathologist.

(b) For a child with a disability who is being considered for placement in special education, the teacher could be the child's regular teacher, or a teacher qualified to provide education in the type of program in which the child may be placed, or both.

(c) If the child is not in school or has more than one teacher, the agency may designate which teacher will participate in the meeting.

Either the teacher or the agency representative should be qualified in the area of the child's suspected disability.

For a child whose primary disability is a speech or language impairment, the evaluation personnel participating under paragraph (b)(1) of this section would normally be the speech-language pathologist.

**Note 2:** Under paragraph (c) of this section, the public agency is required to invite each student to participate in his or her IEP meeting, if a purpose of the meeting is the consideration of transition services for the student. For all students who are 16 years of age or older, one of the purposes of the annual meeting will always be the planning of transition services, since transition services are a required component of the IEP for these students.

For a student younger than age 16, if transition services are initially discussed at a meeting that does not include the student, the public agency is responsible for ensuring that, before a decision about transition services for the student is made, a subsequent IEP meeting is conducted for that purpose, and the student is invited to the meeting.

### 300.345 Parent participation.

(a) Each public agency shall take steps to ensure that one or both of the parents of the child with a disability are present at each meeting or are afforded the opportunity to participate, including—

(1) Notifying parents of the meeting early enough to ensure that they will have an opportunity to attend; and

(2) Scheduling the meeting at a mutually agreed on time and place.

(b)(1) The notice under paragraph (a)(1) of this section must indicate the purpose, time, and location of the meeting and who will be in attendance;

(2) If a purpose of the meeting is the consideration of transition services for a student, the notice must also—

(i) Indicate this purpose;

(ii) Indicate that the agency will invite the student; and

(iii) Identify any other agency that will be invited to send a representative.

(c) If neither parent can attend, the public agency shall use other methods to ensure parent participation, including individual or conference telephone calls.

(d) A meeting may be conducted without a parent in attendance if the public agency is unable to convince the parents that they should attend. In this case the public agency must have a record of its attempts to arrange a mutually agreed on time and place such as—

(1) Detailed records of telephone calls made or attempted and the results of those calls;

(2) Copies of correspondence sent to the parents and any responses received; and

(3) Detailed records of visits made to the parent's home or place of employment and the results of those visits.

(e) The public agency shall take whatever action is necessary to ensure that the parent understands the proceedings at a meeting, including arranging for an interpreter for parents with deafness or whose native language is other than English.

(f) The public agency shall give the parent, on request, a copy of the IEP.

(Authority: 20 USC 1401(a)(20); 14 12(2)(B), (4), (6); 14 14(a)(5))

**Note:** The notice in paragraph (a) of this section could also inform parents that they may bring other people to the meeting. As indicated in paragraph (c) of this section, the procedure used to notify parents (whether oral or written or both) is left to the discretion of the agency, but the agency must keep a record of its efforts to contact parents.

### 300.346 Content of individualized education program.

(a) *General.* The IEP for each child must include—

(1) A statement of the child's present levels of educational performance;

(2) A statement of annual goals, including short-term instructional objectives;

(3) A statement of the specific special education and related services to be provided to the child and the extent that the child will be able to participate in regular educational programs;

(4) The projected dates for initiation of services and the anticipated duration of the services; and

(5) Appropriate objective criteria and evaluation procedures and schedules for determining, on at least an annual basis, whether the short-term instructional objectives are being achieved.

(b) *Transition services.* (1) The IEP for each student, beginning no later than age 16 (and at a younger age, if determined appropriate), must include a statement of the needed

transition services as defined in section 300.18, including, if appropriate, a statement of each public agency's and each participating agency's responsibilities or linkages, or both, before the student leaves the school setting.

(2) If the IEP team determines that services are not needed in one or more of the areas specified in section 300.18(b)(2)(i) through (b)(2)(iii), the IEP must include a statement to that effect and the basis upon which the determination was made.

(Authority: 20 USC 1401(a)(19), (a)(20); 14 12(2)(B), (4), (6); 14 14(a)(5))

**Note 1:** The legislative history of the transition services provisions of the Act suggests that the statement of needed transition services referred to in paragraph (b) of this section should include a commitment by any participating agency to meet any financial responsibility it may have in the provision of transition services. See House Report No. 101-544, p. 11 (1990).

**Note 2:** With respect to the provisions of paragraph (b) of this section, it is generally expected that the statement of needed transition services will include the areas listed in section 300.18(b)(2)(i) through (b)(2)(iii). If the IEP team determines that services are not needed in one of those areas, the public agency must implement the requirements in paragraph (b)(2) of this section. Since it is a part of the IEP, the IEP team must reconsider its determination at least annually.

**Note 3:** Section 602(a)(20) of the Act provides that IEPs must include a statement of needed transition services for students beginning no later than age 16, but permits transition services to students below age 16 (i.e., "... and, when determined appropriate for the individual, beginning at age 14 or younger ..."). Although the statute does not mandate transition services for all students beginning at age 14 or younger, the provision of these services could have a significantly positive effect on the employment and independent living outcomes for many of these students in the future, especially for students who are likely to drop out before age 16. With respect to the provision of transition services to students below age 16, the Report of the House Committee on Education and Labor on Public Law 101-476 includes the following statement:

Although this language leaves the final determination of when to initiate transition services for students under age 16 to the IEP process, it nevertheless makes clear that Congress expects consideration to be given to the need for transition services for some students by age 14 or younger. The Committee encourages that approach because of their concern that age 16 may be too late for many students, particularly those at risk of dropping out of school and those with the most severe disabilities. Even for those students who stay in school until age 18, many will need more than two years of transitional services. Students with disabilities are now dropping out of school before age 16, feeling that the education system has little to offer them. Initiating services at a younger age will be critical. (House Report No. 101-544, 10 (1990))

### 300.347 Agency responsibilities for transition services.

(a) If a participating agency fails to provide agreed-upon transition services contained in the IEP of a student with a disability, the

public agency responsible for the student's education shall, as soon as possible, initiate a meeting for the purpose of identifying alternative strategies to meet the transition objectives and, if necessary, revising the student's IEP.

(b) Nothing in this part relieves any participating agency, including a State vocational rehabilitation agency, of the responsibility to provide or pay for any transition service that the agency would otherwise provide to students with disabilities who meet the eligibility criteria of that agency.

(Authority: 20 USC 1401(a)(18), (a)(19), (a)(20); 1412(2)(B))

### 300.15 Qualified.

As used in this part, the term "qualified" means that a person has met SEA approved or recognized certification, licensing, registration, or other comparable requirements that apply to the area in which he or she is providing special education or related services.

(Authority: 20 USC 1417(b))

### 300.16 Related services.

(a) As used in this part, the term "related services" means transportation and such developmental, corrective, and other supportive services as are required to assist a child with a disability to benefit from special education, and includes speech pathology and audiology, psychological services, physical and occupational therapy, recreation, including therapeutic recreation, early identification and assessment of disabilities in children, counseling services, including rehabilitation counseling, and medical services for diagnostic or evaluation purposes. The term also includes school health services, social work services in schools, and parent counseling and training.

(b) The terms used in this definition are defined as follows:

(1) "Audiology" includes—

(i) Identification of children with hearing loss;

(ii) Determination of the range, nature, and degree of hearing loss, including referral for medical or other professional attention for the habilitation of hearing;

(iii) Provision of habilitative activities, such as language habilitation, auditory training, speech reading (lip-reading), hearing evaluation, and speech conservation;

(iv) Creation and administration of programs for prevention of hearing loss;

(v) Counseling and guidance of pupils, parents, and teachers regarding hearing loss; and

(vi) Determination of the child's need for group and individual amplification, selecting and fitting an appropriate aid, and evaluating the effectiveness of amplification.

(2) "Counseling services" means services provided by qualified social workers, psychologists, guidance counselors, or other qualified personnel.

(3) "Early identification and assessment of disabilities in children" means the implementation of a formal plan for identifying a disability as early as possible in a child's life.

(4) "Medical services" means services provided by a licensed physician to determine a child's medically related disability that results in the child's need for special education and related services.

(5) "Occupational therapy" includes—

(i) Improving, developing or restoring functions impaired or lost through illness, injury, or deprivation;

(ii) Improving ability to perform tasks for independent functioning when functions are impaired or lost; and

(iii) Preventing, through early intervention, initial or further impairment or loss of function.

(6) "Parent counseling and training" means assisting parents in understanding the special needs of their child and providing parents with information about child development.

(7) "Physical therapy" means services provided by a qualified physical therapist.

(8) "Psychological services" includes—

(i) Administering psychological and educational tests, and other assessment procedures;

(ii) Interpreting assessment results;

(iii) Obtaining, integrating, and interpreting information about child behavior and conditions relating to learning.

(iv) Consulting with other staff members in planning school programs to meet the special needs of children as indicated by psychological tests, interviews, and behavioral evaluations; and

(v) Planning and managing a program of psychological services, including psychological counseling for children and parents.

(9) "Recreation" includes—

(i) Assessment of leisure function;

(ii) Therapeutic recreation services;

(iii) Recreation programs in schools and community agencies; and

(iv) Leisure education.

(10) "Rehabilitation counseling services" means services provided by qualified personnel in individual or group sessions that focus specifically on career development, employment preparation, achieving independence, and integration in the workplace and community of a student with a disability. The term also includes vocational rehabilitation services provided to students with disabilities by vocational rehabilitation programs funded under the Rehabilitation Act of 1973, as amended.

(11) "School health services" means services provided by a qualified school nurse or other qualified person.

(12) "Social work services in schools" includes—

(i) Preparing a social or developmental history on a child with a disability;

(ii) Group and individual counseling with the child and family;

(iii) Working with those problems in a child's living situation (home, school, and community) that affect the child's adjustment in school; and

(iv) Mobilizing school and community resources to enable the child to learn as effectively as possible in his or her educational program.

(13) "Speech pathology" includes—

(i) Identification of children with speech or language impairments;

(ii) Diagnosis and appraisal of specific speech or language impairments;

(iii) Referral for medical or other professional attention necessary for the habilitation of speech or language impairments;

(iv) Provision of speech and language services for the habilitation or prevention of communicative impairments; and

(v) Counseling and guidance of parents, children, and teachers regarding speech and language impairments.

(14) "Transportation" includes—

(i) Travel to and from school and between schools;

(ii) Travel in and around school buildings; and

(iii) Specialized equipment (such as special or adapted buses, lifts, and ramps) if required to provide special transportation for a child with a disability.

(Authority: 20 USC 1401(a)(17))

**Note:** With respect to related services, the Senate Report states:

The Committee bill provides a definition of related services, making clear that all such related services may not be required for each individual child and that such term includes early identification and assessment of handicapping conditions and the provision of services to minimize the effects of such conditions.

(S. Rep. No. 94-168, p. 12 (1975))

The list of related services is not exhaustive and may include other developmental, corrective, or supportive services (such as artistic and cultural programs, and art, music, and dance therapy) if they are required to assist a child with a disability to benefit from special education.

There are certain kinds of services that might be provided by persons from varying professional backgrounds and with a variety of operational titles, depending upon requirements in individual States. For example, counseling services might be provided by social workers, psychologists, or guidance counselors, and psychological testing might be done by qualified psychological examiners, psychometrists, or psychologists, depending upon State standards.

Each related service defined under this part may include appropriate administrative and supervisory activities that are necessary for program planning, management, and evaluation.

### **300.306 Nonacademic services.**

(a) Each public agency shall take steps to provide nonacademic and extracurricular services and activities in such manner as is necessary to afford children with disabilities an equal opportunity for participation in those services and activities.

(b) Nonacademic and extracurricular services and activities may include counseling services, athletics, transportation, health services, recreational activities, special interest groups or clubs sponsored by the public agency, referrals to agencies that provide assistance to individuals with disabilities, and employment of students, including both employment by the public agency and assistance in making outside employment available.

(Authority: 20 USC 1412(2)(A); 1414(a)(1)(C))

### **300.308 Assistive technology.**

Each public agency shall ensure that assistive technology devices or assistive technology services, or both, as those terms are defined in sections 300.5–300.6, are made available to a child with a disability if required as a part of the child's—

(a) Special education under section 300.17;

(b) Related services under section 300.16; or

(c) Supplementary aids and services under section 300.550(b)(2).

(Authority: 20 USC 1412(2), (5)(B))

### 300.5 Assistive technology device.

As used in this part, "assistive technology device" means any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of children with disabilities.

(Authority: 20 USC 1401(a)(25))

### 300.6 Assistive technology service.

As used in this part, "assistive technology service" means any service that directly assists a child with a disability in the selection, acquisition, or use of an assistive technology device. The term includes—

(a) The evaluation of the needs of a child with a disability, including a functional evaluation of the child in the child's customary environment; . . .

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## Least Restrictive Environment

### 300.550 General.

(a) Each SEA shall ensure that each public agency establishes and implements procedures that meet the requirements of sections 300.550–300.556.

(b) Each public agency shall ensure—

(1) That to the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are nondisabled; and

(2) That special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily.

(Authority: 20 USC 1412(5)(B); 1414(a)(1)(C)(iv))

(b) Purchasing, leasing, or otherwise providing for the acquisition of assistive technology devices by children with disabilities;

(c) Selecting, designing, fitting, customizing, adapting, applying, retaining, repairing, or replacing assistive technology devices;

(d) Coordinating and using other therapies, interventions, or services with assistive technology devices, such as those associated with existing education and rehabilitation plans and programs;

(e) Training or technical assistance for a child with a disability or, if appropriate, that child's family; and

(f) Training or technical assistance for professionals (including individuals providing education or rehabilitation services), employers, or other individuals who provide services to, employ, or are otherwise substantially involved in the major life functions of children with disabilities.

(Authority: 20 USC 1401(a)(26))

**Note:** The definitions of "assistive technology device" and "assistive technology service" used in this part are taken directly from section 602(a)(25)–(26) of the Act, but in accordance with Part B, the statutory reference to "individual with a disability" has been replaced with "child with a disability". The Act's definitions of "assistive technology device" and "assistive technology service" incorporate verbatim the definitions of these terms used in the Technology-Related Assistance for Individuals with Disabilities Act of 1988.

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## Analysis of Comments and Changes

### Transition Services (section 300.18)

*Comment:* A large number of comments were received on the proposed Note following the definition of transition services. The majority of commenters requested that the last sentence of the Note be revised to delete the statement that the listed activities in the definition are only examples of different types of post-school activities, and, instead, to specify that the listed activities are the minimum that must be provided. Other commenters requested that the listed activities be permissive and not mandatory. One commenter requested that the final regula-

tions define the limits of transition services. (See other comments on transition services relating to sections 300.344–300.347 in this appendix.)

*Discussion:* The Secretary agrees with commenters that the statement in the Note—that the listed activities are only examples—must be deleted. The statute defines both "transition services" and "individualized education program." 20 USC 1401(a)(19) and 1401(a)(20), Paragraph (D) of the definition of IEP provides that an IEP must include a statement of the needed transition services for students with

disabilities who are 16 years of age or older, and for certain students below age 16. The Secretary interprets these provisions to require that, at a minimum, the IEP team for each student must address each of the areas listed in section 300.18(b)(2)(i) through section 300.18(b)(2)(iii) (as incorporated from section 602(a)(19) of the Act), and determine what services are needed by the student in each area. If the IEP team determines that no services within a particular area are needed by the student, the IEP must include a statement to this effect, and the basis upon which that determination was made. See section 300.346(b).

Although the definition of transition services in section 300.18 includes a specific list of activities, that list is not intended to be exhaustive. The Secretary does not believe that further guidance is needed regarding the limits of transition services.

*Changes:* The last sentence of the Note following section 300.18 has been revised to delete the statement that the listed activities are only examples of different types of post-school activities.

*Comment:* One commenter requested clarification of what is meant by the term "outcomes," as used in "outcome-oriented process." Some commenters requested clarification of the term "coordinated," as used in "a coordinated set of activities." A few commenters requested that recreation and leisure, and orientation and mobility, be added to the coordinated set of activities.

A few commenters requested that the term "if appropriate" be deleted as a modifier of the phrases "acquisition of daily living skills" and "functional evaluation," stating that these activities are needed by all students. Another commenter requested deletion of "if appropriate," stating that the IEP is already individualized.

One commenter requested an emphasis on the responsibility of schools to prepare students with severe disabilities to work and live in the

community. Another commenter requested that the definition emphasize the importance of involving the student, parents, other family members, employers, and other community representatives earlier in the student's educational process. One commenter requested a definition of "functional vocational evaluation."

*Discussion:* The term "outcome," as used in the phrase "outcome-oriented process," refers to the results, or intended effect, of the activities on a student. The Secretary interprets the term "coordinated" to mean both (1) the linkage between each of the component activities that comprise transition services, and (2) the interrelationship between the various agencies that are involved in the provision of transition services to a student. With respect to the comment on "outcomes" and the request to clarify the term "coordinated," the Secretary does not believe that further guidance is needed in these regulations. It also is not necessary to specify recreation and leisure, and orientation activities because they could be included under other post-school adult living objectives. As used in section 300.18, the term "if appropriate" is incorporated from the statutory definition of transition services.

It is not necessary to emphasize the responsibility of schools in preparing students with severe disabilities for post-school activities, since transition services are to be provided to each student who is eligible for those services.

The Secretary agrees with the commenter that it is important to involve students, their parents, and appropriate community representatives as early as possible in the educational process—to facilitate a smooth transition from school to employment. However, it is not appropriate to add this as a requirement in the definition under section 300.18. It also is not necessary to add a definition of "functional vocational evaluation." The term is intended to be sufficiently broad to enable States and LEAs to include whatever services or activities are determined appropriate for individual students.

*Changes:* None.

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## IEPs

### **Participants in Meetings; Parent Participation (sections 300.344(c) and 300.345(b)(2))**

*Comment:* Several commenters requested that the term "if appropriate" be deleted from

the Note following section 300.344(c), and that inclusion of students in their IEP meetings be required. Other commenters requested that the Note reflect a preference for student inclusion and clarify who makes the determination of the appropriateness. These commenters

stressed the importance of students having direct involvement in determining their own programs and services.

*Discussion:* The Secretary agrees with commenters that "if appropriate" should be deleted, and that students should be afforded the opportunity to participate and have a voice in their own transition planning. Providing for the inclusion of older students in their IEP meetings is consistent with the current provisions of this part. Section 300.344(a)(4) states that each public agency "shall ensure that the meeting includes . . . the child, where appropriate." The Note following question 21 of Appendix C of these regulations states that "[t]he parents and the agency should encourage older children with disabilities (particularly those at the secondary level) to participate in their IEP meetings." The Secretary believes that, if a purpose of the IEP meeting is the consideration of transition services for a student, the public agency has a responsibility to (1) invite the student to attend the meeting, and (2) consistent with Executive Order 12606, entitled "The Family," inform the parents, in the notice required at section 300.345(a)(1), that the student will be invited. Also, if the student does not attend, the public agency must use other methods to ensure that the student's preferences and interests are taken into account at the meeting.

The Secretary believes that it is important to add a Note to clarify when the public agency is required to invite students to attend their IEP meetings. All students who are 16 years of age, or older, must be invited, since one of the purposes of the annual IEP meeting will always be the planning of transition services. Also, any student younger than age 16 must be invited before a decision about transition services for the student is made.

*Changes:* The following changes have been made: (1) the title of section 300.344(c) has been changed to "Transition services participants"; (2) that paragraph has been revised to specify that if a purpose of the meeting is the consideration of transition services for a student, the public agency must invite the student, and, if the student does not attend, take steps to ensure that the student's preferences and interests are considered; (3) proposed Note 2 following section 300.344 in the NPRM has been revised to clarify when public agencies must invite students to their IEP meetings; and (4) section 300.345 (Parent participation) has been re-

vised at paragraph (b)(2) to provide that, if a purpose of the IEP meeting is the consideration of transition services, the notice of the meeting must indicate this purpose, and indicate that the student will be invited.

*Comment:* Several commenters expressed concern about the requirement in section 300.344(c)(2) of the NPRM that public agencies must ensure that IEP meetings include, "if appropriate, a representative of each other participating agency providing the transition services . . ." The commenters stated that public agencies do not have the authority to require the attendance of personnel from other agencies, and requested that the requirement be deleted, or modified to provide guidance on alternatives for the public agency to follow if other agencies fail to participate (e.g., to require documentation of efforts to involve agencies, or to use other methods to ensure participation).

A commenter requested clarification of the term "a representative of the public agency," as used in section 300.344(a)(1) of the current regulations and proposed section 300.344(c)(1) of the NPRM, noting that the terms appear to be duplicative. Another commenter requested the inclusion of agency representatives who are needed to assist in planning (e.g., case managers or advocates), but whose agencies are not necessarily providing or paying for transition services. One commenter requested that the regulation address the need for providing information on accommodations in post-secondary education and employment that are required under section 504 of the Rehabilitation Act and the Americans With Disabilities Act.

*Discussion:* The Secretary believes that LEAs need the involvement of, and commitment from, the various agencies that will participate in the provision of transition services to students with disabilities, but agrees with the commenters that LEAs cannot compel the attendance of representatives of transition agencies at IEP meetings. Therefore, the Secretary believes that LEAs need to adopt other methods to ensure the involvement of those agencies (e.g., through individual or conference telephone calls, or correspondence).

The Secretary agrees with the commenter that the provision at proposed section 300.344(c)(1) of the NPRM that requires each IEP meeting to include "a representative

of the public agency responsible for providing or supervising the provision of transition services” duplicates the statutory requirement in the current regulations at section 300.344(a)(1) (i.e., “a representative of the public agency . . . who is qualified to provide or supervise the provision of special education”).

Under section 300.344(a)(5), participants at IEP meetings are not limited to representatives of agencies that provide or pay for the provision of transition services, but may include, at the discretion of the agency or parents, other individuals who can be helpful in planning transition services. Because section 300.344(a)(5) already provides for the kind of participation requested by the commenter, no further clarification is needed in these regulations. Considering an individual student’s need for reasonable accommodation in post-school environments is an inherent part of transition planning, and is implicit in these regulations. Therefore, it is not necessary to add a requirement on this point.

*Changes:* Section 300.344(c)(1) of the NPRM has been deleted. The requirement at section 300.344(c)(2) of the NPRM (designated as section 300.344(c)(1)(ii) in these final regulations) has been modified to specify that the public agency must invite “a representative of any other agency that is likely to be responsible for providing or paying for transition services.” A provision has been added to specify that if a transition agency fails to send a representative to the IEP meeting, the public agency must take other steps to obtain the participation of that agency.

#### **Content of IEP (section 300.346)**

*Comment:* A few commenters requested that a note be added to clarify that the statement of needed transition services must be based on current academic, vocational, and functional assessment and evaluation information. Some commenters requested that the regulations specify that the “statement of needed transition services” include (a) goals and objectives, including short-term transitional objectives, and (b) the specific special education services to be provided to the student.

A few commenters requested that the regulations refer to a “plan” rather than a “statement” because this would provide a fully developed schemata for implementation of services. One commenter requested that an exit plan-

ning meeting be held prior to graduation to determine if transition goals have been met and if appropriate services are being provided.

Several commenters expressed concern that other agencies would abandon their commitment to provide transition services, and suggested that the regulations require that participating agencies must provide the transition services agreed to in the IEP. Many of these commenters, citing the legislative history of the 1990 Amendments, requested that the Note following section 300.346 be amended to clarify that the statement of agency responsibilities is intended to address shared financial and programmatic responsibility. One commenter suggested deleting the language regarding participating agencies’ responsibilities, since that concept is already covered in other areas of the Part B regulations.

*Discussion:* The Secretary agrees with commenters that it is important to base transition services on current evaluation and assessment information about a student that is derived from a current evaluation that meets the requirements of sections 300.532 and 300.533.

Nothing in Part B excludes goals and objectives for transition services. However, given that the IEP content requirements in section 300.346(a) do not appear to be appropriate for all types of transition services, the Secretary has determined not to regulate further on this point at this time.

With respect to the request to use the term “plan” in lieu of “statement,” the regulation uses the terminology of section 602(a)(20) of the Act. The Secretary believes that it is not necessary to require that an exit planning meeting be held because exit planning should be discussed as a matter of course in IEP meetings on transition services.

The Secretary believes that it is important to ensure that other agencies continue to provide or pay for those transition services for which they are financially and legally responsible. This position is stated in section 300.347(b) of these final regulations (section 300.347(c) in the NPRM). The Secretary agrees with commenters that the Note following section 300.346 should reflect the legislative history of the Act regarding shared financial responsibilities for transition services.

*Changes:* A new heading for paragraph (a) (“General”) has been added, and the five components of the IEP, as contained in section 300.346

of the current regulations, have been included under that heading. A new paragraph (b) ("Transition services") has been added. The transition services requirements under paragraph (b) have been revised to specify that the IEP for a student must include the three areas listed in

section 300.18(b)(2)(i) through section 300.18(b)(2)(iii), unless (1) the IEP team determines that services are not needed in one of those areas, and (2) the IEP includes information to that effect, including the basis for the determination. (The comments and discussion related to these changes are included under section 300.18.)

The Note following section 300.346 in the NPRM (designated as Note 1 in these final regulations) has been revised consistent with the above discussion. A new Note 2 has been added to clarify the requirement in paragraph (b) related to including in a student's IEP the three transition services areas specified in

section 300.18(b)(2)(i) through section 300.18(b)(2)(iii).

*Comment:* Some commenters recommended decreasing the age criterion to "no later than age 14," and requiring a statement of explanation for any 14- or 15-year-old student not receiving such services. Another commenter recommended that the required age for providing transition services be lowered to age 15.

*Discussion:* Section 602(a)(20) of the Act provides that IEPs must include a statement of needed transition services for students beginning no later than age 16, but adds qualifying language related to students below 16 (i.e., "... and, when determined appropriate for the individual, beginning at age 14 or younger..."). The Secretary believes that it would be inconsistent with the Act to mandate services for all students beginning at age 14 or 15, or to require public agencies to include a statement in a student's IEP explaining why the IEP team determined that transition services were not appropriate.

Although there is no statutory base to mandate transition services for all students beginning at age 14 or younger, the Secretary believes that the provision of these services could have a significantly positive effect on the employment and independent living outcomes of these students in the future, especially for students who are likely to drop out before age 16.

As indicated in the Report of the House Committee on Education and Labor on Public Law 101-476:

Although this language leaves the final determination of when to initiate transition services for students under age 16 to the IEP process, it nevertheless makes clear that Congress expects consideration to be given to the need for transition services for some students by age 14 or younger. The Committee encourages that approach because of their concern that age 16 may be too late for many students, particularly those at risk of dropping out of school and those with the most severe disabilities. Even for those students who stay in school until age 18, many will need more than two years of transitional services. Students with disabilities are now dropping out of school before age 16, feeling that the education system has little to offer them. Initiating services at a younger age will be critical. (House Report No. 101-544, 10 (1990))

Therefore, the Secretary encourages public agencies to provide transition services to students below age 16 when there is a need for those services.

*Changes:* A new Note 3 has been added to reflect the above discussion.

#### **Agency responsibilities for transition services (section 300.347)**

*Comment:* Several commenters expressed concerns about the costs of transition services to educational agencies and requested clarification about the financial responsibilities of other agencies for these services. Two commenters suggested that the regulations require inter-agency agreements concerning transition services. One commenter suggested that the requirement to reconvene the IEP team in proposed section 300.347(a) be deleted. One commenter requested that the regulations include a time limit for reconvening the IEP team when a participating agency fails to provide agreed upon services. Another commenter requested that the requirement to reconvene be revised to specify that only the agencies necessary to the particular issue attend the meeting. One commenter requested that the phrase "to be implemented" be deleted from the description of the "alternative strategies" that the reconvened team would identify.

*Discussion:* Comments regarding the costs of providing transition services are discussed under section 300.346. It is not necessary to add a provision requiring interagency agreements on transition services because the requirements of section 300.152 ("Interagency agreements") apply to transition services.

The Secretary agrees that, in order to ensure that there will not be any undue delay in providing needed transition services to a student, the regulation should include some time-limited standard for reconvening a meeting to identify alternative strategies. The Secretary also agrees that the phrase "to be implemented" is unnecessary. However, the Secretary believes that the statute, which requires that the IEP team be reconvened, requires the public agency to reconvene all members of the team.

When an IEP team is reconvened, an alternative strategy may be able to be identified without changing the student's IEP. In other cases, the IEP team may find it necessary to revise the IEP to include alternative ways to meet the goals that were identified.

*Changes:* Section 300.347(a) has been revised by (1) requiring that the meeting of the IEP team be initiated "as soon as possible," after a participating agency fails to provide agreed-upon services, (2) deleting the phrase "to be implemented," and (3) adding at the end of the paragraph "and, if necessary, revising the student's IEP."

In addition to changes made based on the comments received, the following other changes have been made: (1) the definition of IEP in section 300.340 of the current regulations is now designated section 300.340(a); (2) the definition of "participating agency" in proposed section 300.347(b) has been moved from section 300.347 and added as a definition under new section 300.340(b); and (3) proposed section 300.347(c) in the NPRM has been redesignated as section 300.347(b).

*Comment:* Several commenters requested that the regulations clarify that transition ser-

vices can continue to be provided to students after graduation. One commenter asked for clarification of the responsibility to reconvene the IEP team after graduation.

*Discussion:* Part B of the Act neither requires nor prohibits the provision of services to a student after the student has completed the State's graduation requirements. Thus, if a student is still within the eligible age range for FAPE within the State, the State, at its discretion, could continue to provide needed transition services to the student and use funds under this part to pay for the transition services, or contribute to the cost of those services through a shared cost arrangement with another agency—provided that all applicable requirements of this part are met.

*Changes:* None.

### **General (section 300.380)**

*Comment:* A few commenters requested that the proposal to require the highest requirements in the State applicable to a specific profession or discipline be eliminated. Another commenter requested that the "highest standards" be defined, and one commenter asked if these standards applied to related services and support personnel.

*Discussion:* The Secretary believes that a State's CSPD should be consistent with the personnel standards requirements in section 300.153. Those standards apply to all personnel who provide special education or related services to children with disabilities. "Highest requirements in the State applicable to a specific profession or discipline" is defined in section 300.153 to be State-specific.

*Changes:* No change has been made in response to the comments. However, a technical change has been made by Public Law 102-119 to require that States ensure that the CSPD under Part B is consistent with the purposes of the IDEA and the CSPD for the Part H program.

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## *Rehabilitation Counseling Services*

### **Rehabilitation Counseling Services (section 300.16(b)(10))**

*Comment:* Some commenters indicated that rehabilitation counseling services should be provided by State vocational rehabilitation

agencies under Title I of the Rehabilitation Act of 1973, and not be a requirement under this part. Commenters also expressed concern regarding the potential responsibility and the financial burden to LEAs to provide services that were previously the responsibility of other agen-

cies, as well as the inability of LEAs to commit the resources of other agencies. Two commenters requested that the definition of "rehabilitation counseling services" be broadened to mention additional services. A commenter requested clarification about the intent of the new requirement, especially with respect to services provided under the Rehabilitation Act of 1973.

*Discussion:* Public Law 101-476 added "rehabilitation counseling" as a type of "counseling service" in the list of related services in Part B. The Report of the House Committee on Education and Labor on Public Law 101-476 describes rehabilitation counseling as an important related service in special education, as well as an important transition service in preparing students with disabilities for employment or post-secondary education. In addition, the report states, "It is the intent of the Committee that rehabilitation counseling . . . be provided to all students with disabilities for whom this service is necessary for the achievement of the individualized education program." (See House Report No. 101-544, 7-8 (1990))

"Rehabilitation counseling services," as defined in section 300.16(b)(10), includes a variety of services, such as career development, employment counseling, and employment preparation. The term also includes vocational rehabilitation services provided to students with disabilities under the Rehabilitation Act of 1973. The Secretary believes that the definition is broad enough not to require the listing of additional services.

Because "rehabilitation counseling services" is a type of related service under "counseling services" in Part B, public agencies must provide that service to any student with a disability, if the IEP team determines that the service is required to assist the student to benefit from special education. As indicated in the discussion to the comment that follows, rehabilitation counseling may be provided by existing LEA staff, if they are qualified under section 300.15 to provide those services in areas appropriate to their disciplines.

The Secretary recognized that LEAs do not have the authority to commit the resources of another agency. However, the SEA is responsible—through the use of interagency agreements required under section 300.151, or other means—to ensure that services that would have been provided by other agencies will continue to be provided, either by those agencies, or by the LEA responsible for providing FAPE to the child. In accordance with section 300.150, States may not permit LEAs to use funds under this part to provide or pay for services that would have been paid for by a health or other agency pursuant to policy or practice but for the fact that these services are now included in a student's IEP.

*Changes:* None.

*Comment:* Many commenters requested that the term "qualified counseling professional" be deleted from the definition of "rehabilitation counseling services." They were concerned that it would add a new personnel category that would require States to adopt new certification or licensure standards, and preclude the continued provision of services by existing school staff, who are otherwise qualified. A few commenters suggested that "certified" be used in lieu of "qualified."

*Discussion:* The Secretary believes that existing school staff (e.g., prevocational counselors, work-study coordinators, or special education teachers), who are qualified under section 300.15, should be permitted to provide rehabilitation counseling services appropriate to their disciplines. The qualifications of personnel providing those services, like the qualifications of personnel providing other services, is a matter to be determined by each State. The method used to specify the qualifications of personnel (e.g., certification, licensure, or registration) is also a matter that is left to State discretion.

*Changes:* The term "a qualified counseling professional" has been changed to "qualified personnel."

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### *Assistive Technology and Devices*

#### **Assistive Technology (section 300.308)**

*Comment:* A few commenters questioned the Department's authority to require assistive technology devices and services under section 300.308, stating that the only new statuto-

ry provisions affecting Part B are the definitions of these terms in 20 USC 1401(a)(25) and (a)(26).

Several commenters requested that the provisions on assistive technology devices and ser-

vices be amended to clarify that the cost of personal or medical devices should be borne by parents or other public agencies and not educational agencies. A few commenters requested that the final regulations clarify that an assistive technology device can be taken home by a child if it is needed to complete a homework assignment; other commenters stated that devices should be used only at school. One commenter suggested that, with respect to a child's need for assistive technology devices and services, the phrase "following evaluation of such needs" be added to proposed section 300.308(a).

*Discussion:* The Secretary believes that the requirements for assistive technology in this part are fully authorized by law. The report of the House Committee on Education and Labor on Public Law 101-476 states:

... The Committee is aware that since the passage of the Education of the Handicapped Act, advances in the development and use of assistive technology have provided new opportunities for children with many disabilities to participate in educational programs. For many children and youth with disabilities, the provision of assistive technology devices and services will redefine "an appropriate placement in the least restrictive environment" and allow greater independence and productivity . . . .

The Committee bill incorporates definitions for assistive technology service and assistive technology device in order . . . (2) to increase the awareness of assistive technology as an important component of meeting the special education and related service needs of many students with disabilities, and thus enable them to participate in, and benefit from, educational programs . . . . (House Report No. 101-544, 8-9 (1990))

The Secretary believes that assistive technology devices and services may be essential to the provision of FAPE to certain children with disabilities. Section 300.308 provides only that these devices and services must be made available if they are required under current provisions of the regulations relating to special education, related services, and supplementary aids and services.

A determination as to whether an assistive technology device or service is required in order for a child to receive FAPE must be made on an

individual basis using the evaluation procedures, the procedures for developing IEPs, and the procedures for placement described in these regulations. Similarly, a decision as to whether a child may use a device or service in settings other than the child's school (e.g., the child's home or other parts of the community) also must be made on an individual basis.

Under section 300.301, a public agency may use whatever State, local, Federal, and private sources of support are available to provide or pay for services, including assistive technology services or devices. These services and devices must be provided at no cost to the child or parent under sections 300.8 and 300.300.

The Secretary does not believe that it is necessary to add the phrase "following evaluation of such needs" because the concept of determining needs based on evaluation is central to these regulations.

*Changes:* None.

*Comment:* Several commenters objected to proposed section 300.308(b), regarding the provision of supplementary aids and services for children who are educated in regular classes, because the proposed language implied that assistive technology devices and services under this part must be provided to children who do not receive special education and related services.

*Discussion:* Under section 300.550(b)(2), "supplementary aids and services" must be provided to children with disabilities who have been determined to be eligible under Part B and are able to be educated in regular classes with the use of those aids and services. Assistive technology can be a form of "supplementary aids and services."

*Changes:* Section 300.308 has been revised to make it clear that assistive technology devices and services must be provided only if they are required under current regulations as part of a child's special education (section 300.17), related services (section 300.16), or supplementary aids and services (section 300.550(b)(2)).

#### **Assistive Technology Device; Assistive Technology Service (sections 300.5 and 300.6)**

*Comment:* One commenter requested that the proposed definitions of "assistive technology device" and "assistive technology service" be modified to make them as educationally rele-

vant as possible. Another commenter stated that, in the definition of "assistive technology service" (section 300.6(f)), the term "children" should be used in lieu of "individuals." Another commenter suggested that each State be required to include in the State plan its system for providing information and technological assistance for LEAs regarding assistive technology acquisition.

A commenter requested that procedures for determining when a child needs assistive technology be added to the final regulations. Another commenter requested that evaluations be done by personnel qualified to assess the technological needs of children with disabilities. Another commenter was concerned that school personnel would not have the training and knowledge to provide required services.

*Discussion:* The definitions of "assistive technology device" and "assistive technology service" are taken from sections 602(a)(25) and 602(a)(26) of the Act, and there is no authority to change the substance of those definitions. However, the requirement in section 300.308 limits the provision of assistive technology to educational relevancy—i.e., an assistive technology device or service is only required if it is determined, through the IEP process, to be (1) special education, as defined in section 300.17, (2) a related service, as defined in section 300.16, or (3) supplementary aids and services required to enable a child to be educated in the least restrictive environment. The Secretary believes that the effect of section 300.308 is to limit the provision of assistive technology devices and services to those situations in which they are required in order for a child to receive FAPE.

The Note following "assistive technology service" in the NPRM explained that, except for replacing "child" for "individual," the definition is taken directly from section 602(a)(25)-(26) of the Act. The term "individuals" was inadvertently included in paragraph (f) of that definition. Therefore, that term is being changed to "children" in these final regulations.

The Secretary believes that while an SEA, at its discretion, might choose to provide technical assistance to LEAs about assistive technology or other provisions required in this part, it would be inappropriate and burdensome to require that a State include a description of a technical assistance system on assistive technology in the State plan.

It is not necessary to add procedures for determining the need for assistive technology services because this determination is made as part of the individual evaluation of each child required in sections 300.530-300.534. These evaluations must be done by qualified individuals, as specified in section 300.532(a)(3).

In instances where LEA personnel do not have the knowledge to provide assistive technology services, funds under this part may be used to obtain the necessary expertise, and, if appropriate, to train existing school personnel. The Secretary does not believe that further guidance is needed on the matters raised by these commenters.

*Changes:* In section 300.6(f), the clause "or are otherwise substantially involved in the major life functions of individuals with disabilities" has been revised to substitute the term "children" for "individuals."

## Sample Learning Style and Strategies Questionnaire

Student Name	Chronological Age	Date Mo/D/Yr
School	Grade	
Person Completing Report	Position	

To: You, the Student

This is **not** a test. There are no right or wrong answers. The following checklist items are meant to gain a better picture of you as a learner. Feel free to add comments at any point or to add changes to any item checked. Ask questions about anything that is unclear. Knowing how you learn and how you honestly feel about school tasks can help teachers help you to be more successful in school.

### Learning Factors

Best Time to Study:

- Morning       Mid-day       Afternoon       Evening  
 Night       Other \_\_\_\_\_

Best Place to Study:

- Home       School       Other \_\_\_\_\_  
 If at home:       My Room       Kitchen       Dining Room  
                           Living Room       Other \_\_\_\_\_  
 If at school:       Library       Learning Center  
                           Study Hall       Other \_\_\_\_\_

**Preferred Rules** (related to when, where, how long, talking or not, and so forth during study)

- Rules:       Strict       None       Flexible  
 Rules made by:       Parents       Teacher       Class       Me

Movement During Study:

- Little       Occasional       Active

Best Location to Study:

- At desk/table       Sitting (comfortable chair)  
 On floor       Reclining (couch or bed)

Best Sound Conditions Under Which to Study:

- Quiet       Music (kind: \_\_\_\_\_ volume: \_\_\_\_\_)  
 TV       Conversation       Other \_\_\_\_\_

Do interruptions bother you? \_\_\_\_\_



Planning study time:

- It's easy to plan the right amount.
- I have trouble planning the right amount of study time because
  - I run out of time.
  - I study the wrong things.
  - I can't remember after I've studied.
  - I plan, but put things off too long.
  - I don't plan.
  - I don't study.

**Test Approach**

"When I study for tests, I . . ."

- read the material the day or night before the test
- spread out studying over 2-3 days/nights
- panic:
  - because I didn't study
  - even though I studied

I do these things to get ready for a test:

- Re-read notes
- Write new notes
- Discuss notes
- Read the text (first time)
- Re-read text
- Discuss text
- Copy charts, graphs, figures, flowcharts of importance
- Avoid studying:
  - It makes me nervous
  - It won't help
  - I already know all the information
  - I'd rather do something/anything else

**Memorizing Strategies** The things I do to help me memorize or remember include . . .

- going over and over and over the material (How many times? \_\_\_\_\_).
- thinking of mental pictures to help me remember
  - realistic things.
  - nonsense/unreal things.
- making up words or sentences to remember the order of lists.
- breaking lists into smaller groups to learn.
- outlining the material.
- using rhyming to recall things.
- putting things into categories to help remember.
- other \_\_\_\_\_

**Insights/Reactions** (Check any and all answers that are right for you.)

Tests: Different people find different kinds of test question types hard or easy. Some say "I hope it's an essay test" and others say "True-false!" Check these test question types according to how difficult you find them.

D = Difficult for me	E = Easy for me			N = Neutral difficulty			
	D	E	N		D	E	N
Multiple choice questions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Short answer questions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
True/false questions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Essay questions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Matching questions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fill-in questions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Listing questions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Label (example, diagrams, maps, and so forth)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other _____					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Assignments** Label these assignment types according to how difficult you find them.

D = Difficult for me	E = Easy for me			N = Neutral difficulty			
	D	E	N		D	E	N
Daily/chapter questions (I do them <input type="checkbox"/> in class/ <input type="checkbox"/> as homework)					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Experiments/demonstrations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Written reports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Group projects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Oral reports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Individual projects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Workbook assignments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other _____					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Sources of Help** (Check all that apply.)

Frustrations: "I become most upset or frustrated with . . ." (Check all that apply.)

- teacher presentations (especially \_\_\_\_\_)
- reading textbooks:
  - too difficult to read
  - I don't understand the information
- tests:
  - I can't read them
  - I don't understand the questions
  - I don't remember the information
  - I don't study enough
- grades (I get A's/B's/C's/D's/F's) (I expect \_\_\_\_\_'s) (I earn \_\_\_\_\_'s).
- my classmates' reactions.

- my parents' reactions.
- my teachers' reactions.

Explain the reactions that bother you.

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My general feelings as a student, about school:

- It's fun!
- It's OK.
- I'd rather not have to be here.
- I hate it.

Comments: \_\_\_\_\_  
\_\_\_\_\_

What could make it better?

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(The Learning Factors section is based on work in *Learning Styles* by R. Dunn and K. Dunn)

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## Sharing Resources

The following four resources can be used as handouts or support material in various different ways. The occurrence of any of these "red flags" should send readers to review their programs or approaches. Their visual appeal should make them more easy to present and share.

The logo features a black flag with a white pole on the left. The word "RED" is written in white, bold, sans-serif capital letters across the top of the flag, and "FLAGS" is written in white, bold, sans-serif capital letters across the bottom. To the right of the flag, the words "in Assessment" are written in a smaller, italicized, serif font.

## RED FLAGS *in Assessment*

Parent consent is not obtained prior to assessment.

Notice of reevaluation is not provided to parents prior to beginning reevaluation.

Parents are not informed of their rights at notice of evaluation or reevaluation and in a language they understand.

Evaluation does not include at least two persons qualified to evaluate for suspected learning disabilities.

Assessment is not individualized.

Transition needs are not evaluated.

Assessment focuses on less than the four required criteria and obtaining diagnostic information.

Assessment is limited to norm referenced, standardized assessment tools.

Assessment is limited to informal and/or criterion referenced devices.

Assessment doesn't identify strengths.

Parents are not informed or invited to the M-team meeting.

A regular education observation was not conducted by or was not included in the written report of one of the professionals qualified to evaluate for suspected learning disabilities.



## **RED FLAGS** *in IEP Development*

Local education agency representative does not attend meeting to develop IEP.

IEP meeting does not include at least one person knowledgeable in the area of handicap.

IEP is written prior to meeting.

Parents do not attend IEP meeting.

IEP is written as separate components by each person involved in developing the plan rather than as one unified document.

Justification for removal from regular education is not thoroughly documented with child specific evidence establishing that this student is unable to obtain an appropriate education in an environment with non-handicapped peers.

Use of supplementary aids and services and reasonable modifications were not considered in justifying removal from regular education.

Services and staff to provide services are determined based on handicap label rather than on individual student need.

Two or more students have identical IEPs.

Goals and objectives remain the same for years.

Goals have no relevant present level of performance.

Goals and objectives guarantee that student will continue to fall behind peers (for example, a four-month gain in one year).

Modifications needed in regular education are not included in IEP.

IEP does not reflect needed transition services.

IEP is curriculum-driven rather than student-driven.

Required components are left blank or dittos or arrows are used rather than clearly stated phrases.

IEP is not clear to all who use it including parents.

Dates of service imply summer school or services during holidays.

# *RED FLAGS* in *Instructional Delivery*

Instructional services are provided in the "LD Room" unless participants in developing the IEP are convinced the student will pass the regular education class.

No time is available to the LD teaching staff to consult with or provide support to regular classroom teachers working with LD students.

Instructional services follow a curriculum or a textbook rather than the individual needs of the student.

Instructional delivery follows a planned sequence that is not related to ongoing evaluation of student's acquisition or mastery of skills and knowledge.

Modifications do not reflect individual student needs.

Regular education staff are permitted to deny handicapped students their civil rights by refusing to make appropriate modifications such as increased time to complete assignments or tests, reduced assignments or tests, not including in the grading those aspects of a student's work which reflect his/her handicap (for example, spelling errors, sloppy handwriting), and others.

Students with handicaps are isolated or grouped together for all activities.

Third grade reading tests, minimum competency tests, and other district standardized tests are not given to LD students because they will bring down the district's overall scores or require too much staff time to remediate.

EEN students who are at risk or who are gifted and talented are not permitted to participate in those programs because they are labeled handicapped.

Instructional services and placement are based on district policies rather than individual educational needs.

All LD students who need remedial reading are taught using a single approach (Direct Instruction, Whole Language, and so on) because this approach matches the philosophy and training of the teacher.

All LD students receive all of their education in the regular education classes because REI or Inclusion is district policy.

The logo features a stylized red flag on a black pole to the left of the text. The word "RED" is in a large, bold, white sans-serif font, and "FLAGS" is in a smaller, bold, white sans-serif font below it. To the right of "FLAGS" is the text "in M-Team" in a smaller, italicized serif font.

## RED FLAGS in M-Team

Eligibility decisions are made by one individual rather than through the collective judgment of the team of professionals (M-team).

Individuals attend the M-team meeting who were not listed on the M-team notice to parents.

Individual M-team members come to the M-team meeting without a prepared written report of their evaluation.

A regular education teacher who is knowledgeable about the student and qualified to teach a student of that age is not appointed to the M-team.

Parents are not made to feel like participating members of the M-team.

M-team's summary report is not written as a team report, but rather as a compilation of individually gathered information.

M-team members are prevented from submitting separate M-team reports when they don't agree.

Director of Special Education approves one of multiple M-team reports without attending M-team meeting or reconvening M-team.

M-team report does not document that student found to have a learning disability meets all four criteria in PI 11.35, Adm. Code.

M-team finding no need for EEN neglects to identify other services/modifications needed by the student.



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