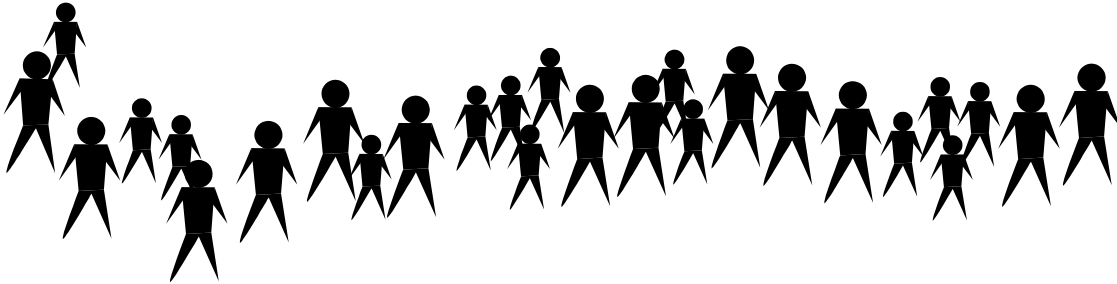


Informational Paper # 1: Dyslexia



This is the first in a series of papers posted on the DSE website that are designed to provide technical assistance to parents and the field as well as answer questions on topics of interest. The paper was prepared by the SLD (Specific Learning Disabilities) Leadership Committee in conjunction with the Division of Special Education. It is meant to be informational in nature and is not designed as a policy paper.

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SLD Leadership Committee

Karen Adams	Special Education Coordinator St. Cloud Public Schools
Larry Anderson	Special Education Coordinator Bemidji Regional Interdistrict Cooperative
Linda Ayers	Special Education Coordinator Elk River Public Schools
Palmer Bridges	Special Education Coordinator Minneapolis Public Schools
Stephanie Corbey	Director of Special Education Burnsville-Eagen-Savage Public Schools
Lisa Ellingson	Special Education Coordinator Fairmont
Barbara Geisel	Director Minnesota Life College, Minneapolis
Fran Johnson	Special Education Coordinator Benton-Stearns Special Education Cooperative
Amy Mahlke	Instructional Consultant Hiawatha Valley Education District
Lory Perrryman	Advocate Family Services of St. Paul
Jackie Migler	Special Education Coordinator Moorhead Public Schools
Janis Parkman	Special Education Coordinator St. Paul Public Schools
Barb Sorum	Advocate Minnesota Association for Children's Mental Health
Carol Svingen	Special Education Coordinator Southwest/West Central Service Cooperatives
Kathleen Wilder	Special Education Teacher White Bear Lake Public Schools

**Committee Chair: Nancy W. Larson, Ph.D.
State Learning Disabilities Coordinator**

Informational Paper # 1: Dyslexia

Purpose

This informational paper is designed to answer questions from parents, students, and teachers who are interested in "dyslexia."

Background

"Dyslexia" is the most recognizable term in the field of learning disabilities. It is typically associated with a child's inability to learn to read. There is much interest in how to "treat" dyslexia through identifying specific practices and techniques for developing and improving the reading skills of children. A common misconception with the term is that parents and others may think that "dyslexia" is a cause for a child's difficulty learning to read and are unaware of the actual meaning of the term. Dyslexia is a descriptive term, which means an impairment in the ability to read. Contributing to the misinterpretation of the term "dyslexia", are recent media reports about "dyslexia" and about researchers who are beginning to identify anatomical and chemical differences in the brains of good and poor readers.

The term and concept of "dyslexia" originated in the late 1800s when two researchers (Dejune & Bastian) found that a variety of neurological problems accounted for reading problems in their patients. Language processing became the basis of the concept and much of the early research in the field was conducted in clinics where speech clinicians were working with victims of war. From then until now, the path of "dyslexia" research has been quite divergent and broadly inclusive of an array of topics such as delayed language development, light sensitivity, oral reading, directional confusion, memory deficits, problems with attention, right-left confusion, reduced naming rates, motor sequencing problems, verbal processing deficits, family history, verbal-performance IQ split, and social behavior problems.

Parents, teachers and advocates frequently ask if "dyslexia" is recognized as a disability in Minnesota. The short answer is "yes" it is included under "specific learning disabilities" in the Individuals with Disabilities Act of 1997 (IDEA 34 CFR §300.7 and §300.54) definition of specific learning disabilities. However, "dyslexia" is not a separate categorical disability.

Definition

Dyslexia may be viewed as a specific learning disability that severely affects language development and impacts reading and other language based development and functioning. It literally means "the impairment of the ability to read (Webster's New World Dictionary, 1996)." It is estimated that between one and one-half to five percent of the population have some of the symptoms of dyslexia (Spofford & Grosser, 1996); and it is the most prevalent type of learning disability.

The symptoms of dyslexia do not occur either from a lack of intelligence or from a lack of desire to learn, but researchers have not yet identified the exact causes. As is the case for most disorders, there is a continuum of the effects of the disorder ranging from mild to severe. **In order for a child with a diagnosis of dyslexia to be eligible for special education services, a school evaluation team, including the parents, must make a determination that the disability severely impacts school performance, and the student must meet the eligibility criteria found in MN Rule 3525.1341.** A child with a diagnosis of dyslexia may, in this case, be eligible for special education under the Individuals with Disabilities Acts (IDEA) 1997 and Minnesota Rule 3525.1341.

Among educational organizations there are various definitions of "dyslexia." For example, the National Institute of Health and the International Dyslexia Association define "dyslexia" as

..."One of several distinct learning disabilities. It is a specific language-based disorder of constitutional origin, characterized by difficulties in single word decoding, usually reflecting insufficient phonological processing. These difficulties in single word decoding are often unexpected in relation to age and other cognitive and academic abilities; they are not the result of generalized developmental disability or sensory impairment.

Dyslexia is manifested by variable difficulty with different forms of language, often including, in addition to problems with reading, a conspicuous problem with acquiring proficiency in writing and spelling" *Adopted by the National Institute of Health, 1994, and the Research Committee of the International Dyslexia Association in 1994 for the purpose of uniformity in scientific research.*

Please note: A diagnosis of "dyslexia" does not automatically mean eligibility for special education. The determination of eligibility for special education is a team process and includes parents (Please refer to the chart entitled, "Special Education Process and Dyslexia").

Symptoms of Dyslexia

According to Nancy Mather, a noted researcher in the field of learning disabilities, dyslexia is *"a problem with rapid word identification and/or spelling caused by poor phonological and/or orthographic awareness. Its treatment requires specialized methods and accommodations. This implies a biological basis for the difficulty, and includes difficulties with mastery of the coding aspects of reading and/or spelling (persistent spelling difficulties). It is a complex syndrome, as opposed to one isolated symptom (e.g., only poor spelling) (Mather, 2000)."*

Dyslexia is caused by a breakdown in the acquisition and application of alphabetic knowledge (phonology or orthography) resulting in slow, labored reading development, delayed automaticity, and poor spelling. Effective methods for treating dyslexia require a combination of direct intensive instruction in the alphabetic system and methods to build rate and fluency.

The history of dyslexia research, the heterogeneity of dyslexic children, and the very complexity of the reading process argue against any single-, two-, or even three-factor explanation. Other deficits associated with the term dyslexia, occur in the acquisition of writing skills. Examples of deficits in writing are difficulty forming letters correctly, inconsistent size of letters, slow production speed, difficulty staying on the line, too much pressure on the pencil, and multiple tracings over letters. Also, there may be difficulties with oral language such as syntax, morphology, vocabulary, ideation, and cohesion (Mather, 2000).

Important Definitional Issues in "Dyslexia" and Special Education

Disability

State and federal law and rules define the term "disability" (34 CFR §300.7). Children identified in any of thirteen disability categories are entitled to a free and appropriate public education (FAPE) at no cost to the parent. FAPE includes due process protections, parent participation, specially designed instruction, modifications and accommodations and access to the general education curriculum (34 CFR §300.121)

Dyslexia

This is a term that is used to describe a cluster of symptoms related to difficulty learning to read, but it is not a cause for reading problems in the medical sense. The effects of "dyslexia" on a student's educational functioning may range from mild to severe and may require varying intensities of special education services or none at all. In some cases, general education techniques will be sufficient. A term in special education rule that includes dyslexia is "specific learning disabilities." School personnel will more often use the term "specific learning disability" instead of "dyslexia."

Eligibility

Meeting Minnesota eligibility criteria for specific learning disabilities means that the effect of the learning disability on the child's school performance is severe. Specific Learning Disabilities (SLD) criteria in state and federal rule may be found on the CFL website (cfl.state.mn.us/SPECED/guidelines, then click on the SLD Companion Manual) or in Minnesota Rule (M.R. 3525.1341). SLD is a categorical disability that entitles children who meet certain criteria, to special education. Dyslexia is **not** one of the 13 federal and state disability categories and there are no criteria for "dyslexia" in state or federal rule. It is included under the umbrella of specific learning disabilities. This may be seen in the definition of a specific learning disability found in IDEA:

“...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, including such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental apraxia CFR 300.7 (10).”

Dyslexia is a term that is sometimes used by clinical psychologists and other professionals to refer to a student's problems in learning to read. The term "dyslexia" does not appear in the *Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV)*, the primary diagnostic manual for clinicians.

Reading Disability

This is a term used by reading specialists to describe a child's severe deficit in reading. It is not one of the thirteen categorical disabilities in state and federal special education law and rule and is not included under the umbrella of specific learning disabilities. Therefore, it does not have corresponding eligibility criteria in law or rule. However, students with reading disabilities may be found eligible under one of the thirteen eligibility categories when referred for a special education evaluation.

Specially Designed Instruction

If state SLD eligibility criteria are met, a student who has a clinical diagnosis of "dyslexia" may be entitled to receive specially designed instruction based on his or her assessed needs related to the disability. The specialized teaching techniques used to teach students with specific learning disabilities are the same as those recommended for students with a diagnosis of "dyslexia."

Specific Learning Disability

Specific learning disability is one of the thirteen categories of disabilities defined in federal and state special education law and rule. Minnesota eligibility criteria for SLD has three required eligibility components: severe underachievement,

severe discrepancy between ability and achievement, and information processing. All three components must be met in order for a child to be eligible for special education under SLD. The SLD Companion Manual explains how to apply the criteria to evaluation results are addressed in a team decision-making process.

Licensed Teachers of Learning Disabilities

Learning disabilities teachers are trained specialists who design and perform specially designed instruction for students with learning disabilities based on a student's assessed needs written in the Individual Educational Program (IEP). Teachers who are licensed in the area of LD are trained to develop specially designed instructional programs for students with specific learning disabilities.

Current Research into Causes

Current research in the area of reading supports the idea that many reading difficulties stem from a child's deficits in phonological processing or awareness. There is some indication that, in addition to reading, students with specific learning disabilities (or a clinic's diagnosis of "dyslexia") may also experience difficulty with written language and other language related areas. For example, some children have difficulty with phonological awareness, verbal memory, and rapid naming ability. These skills relate to a child's ability to master the sound/symbol systems involved in reading and the necessary storage and retrieval skills required for a child to understand the printed language and to acquire the speed and automaticity needed for fluency in reading.

Some researchers think that the symptoms of "dyslexia" are linked to central nervous system dysfunctions; others disagree. Some are working to classify subtypes including subtypes with visual-phonetic problems, auditory linguistic problems or mixed issues (Spofford and Grosser, 1996). Perhaps as the advances of science continue to pinpoint the specific psychological or neurological processes involved in reading dysfunctions, more specific diagnoses of SLD will be made. Within the past five years, some markers or indicators for a specific learning disability have been identified.

Controversial Therapies

Historically, many controversial theories have been associated with "dyslexia." Just a few of these methods are: ocular therapy, cranial manipulations, megavitamins, Feingold K-P diet, hair mineral analysis, Dolman-Delacato system, perceptual-motor training, and scotopic sensitivity. **While some proponents of these therapies claim great improvements or "cures," many of these methods do not have a research base demonstrating positive effects on school performance (Spofford, C. & Grosser, G.S., 1996).**

Effective Teaching Methods

Researchers are increasingly identifying effective methods for students with learning disabilities. **There is no single teaching method that will always produce positive skill improvement for a student with a diagnosis of “dyslexia.”** However, Shaywitz and Shaywitz at Yale University (2002) say that “Now there is an urgency to identify and provide dyslexic children with effective reading tools. Researchers say study findings reaffirm that children should be taught using phonemes, distinctive letter and sound traits.” Teaching the alphabetic-phonetic system and symbol awareness, allows the child to develop the awareness that words carry meaning and are comprised of sounds, which are represented by letters in a certain order.

The following methods have a research base, which suggests they may be effective with students struggling with reading: phonemic awareness training, strategy instruction, sequential phonics programs such as Orton, continuous progress measurement, graphic organizers, story maps and direct teaching methods. Methods that have been used with these children for some time with positive results include, visual, auditory and kinesthetic approach (VAK), repeated readings, reflective strategies such as KWL, SQ3R, and the Kansas Learning Strategies. The most important component of an effective program for this population of children is that the instruction is highly sequential and builds one skill upon the other with extensive practice incorporated as part of the instruction. A resource list for more information is provided at the end of this paper.

Current research indicates instruction using a multi-sensory approach has been found to be beneficial in linking the learning pathways of a child’s senses. Combining visual, auditory and tactile instruction appears to enhance both learning and the mastery of a task (SLD Companion Manual, 1998).

Frequently Asked Questions about Dyslexia

Do schools evaluate students for dyslexia?

Not for this specific disorder. When a parent or other concerned person refers a child for a special education evaluation, a team conducts a comprehensive evaluation. Based on the results of the evaluation, the team makes a determination of eligibility for special education services using the thirteen state and federal eligibility criteria. A student who has great difficulty learning to read may have "dyslexia," according to a clinic or Webster's definition. If this same child meets the three SLD eligibility criteria components of severe underachievement, severe discrepancy between ability and achievement, and an information-processing deficit, and, if the area of learning most severely affected was reading, the child may be eligible for special education. *However, school personnel when making this determination, would use the term "specific learning disability (SLD)" since this is the term that includes "dyslexia" in special education law and rule."*

Are students with a diagnosis of "dyslexia," automatically eligible for special education and related services?

No, not all students with a diagnosis of "dyslexia" are found eligible for special education. In order to be eligible for special education services (in SLD), a student must meet the three eligibility components for specific learning disabilities in state and federal rule and also be found in need of special education services. The effects of the disability on educational performance must be severe. The school evaluation team is required to consider evaluation information from outside sources presented by the parent, but the team must make its own determination of eligibility. The team may, but does not have to, adopt and accept the recommendations or results from an outside evaluation report. A diagnosis of "dyslexia" by a clinic does not change the standard in law and rule that must be followed by schools in a comprehensive special education evaluation to determine eligibility for special education and related services.

If a parent or teacher asks, "Does this child have dyslexia?" How should the special education teacher respond?

School personnel should explain what the term "dyslexia" means (see section on Definition and Background). An appropriate response to a parent or teacher who requests an evaluation for "dyslexia" is to explain that the term is included in federal rule and is one of a list of disorders included under "specific learning disability."

A team may wish to ask for more information from the parent or referring teacher about their specific concerns and any other relevant information. In conjunction with the parent or referring teacher, teams must decide whether a team meeting

and review of existing data is needed to proceed with a comprehensive special education evaluation. Parents must be informed of their rights under special education laws and rules and must give their consent for the evaluation. Then, the student may be evaluated and found eligible for special education and related services. In order for a student with "dyslexia" to be eligible for special education services, all three components of Minnesota SLD eligibility criteria must be met at a severe level. What is relevant for the special education teacher is not a diagnosis of "dyslexia" but whether the student is eligible under state and federal criteria.

What about a child with visual tracking problems or who, according to an optometrist, requires eye (vision) therapy? Isn't he or she "dyslexic"?

A visual tracking problem is not an eligibility component for specific learning disabilities. Some children with visual tracking problems may meet the Minnesota eligibility criteria for specific learning disabilities, but others may not. Students must meet the three SLD eligibility components required in state rule to be determined eligible for special education services due to a specific learning disability.

Can a parent request a specific therapy such as ocular therapy, the Orton Program, Earobics, or FastForWord for a child with "dyslexia"?

Yes, a parent may make such a request. However, choosing a specific instructional methodology is the responsibility of the licensed trained special education staff. Developing goals and objectives based on a student's assessed needs is the responsibility of the IEP team, including the parents. Goals and objectives do not need to specify the teaching methodology. So, while a parent may make such a request, the licensed learning disabilities teacher makes the final decision about the methodology with help from the IEP team.

My child makes reversals when he or she reads or writes. Is he or she "dyslexic"?

Not necessarily. Young children, as part of normal cognitive development, display many of the symptoms associated with the term "dyslexia," such as scrambling letters, reversals in spelling words, or confusion in reading. These symptoms do not, by themselves, constitute a diagnosis of "dyslexia". However, in an older child, reversals, along with difficulties in rapid naming, may be clues that a child may have a specific learning disability and that a referral for a special education evaluation might be warranted.

Where should I look for more information on "dyslexia"?

Some helpful resources are listed in the section, entitled "References and Resources."

References & Resources

Council for Learning Disabilities (CLD) www.cldinternational.org

Council for Exceptional Children, Division of Learning Disabilities (CEC-DLD)
http://teachingld.org/ld_resources/alerts/1.html

Family Service Inc. of St. Paul Lory Perryman (651) 222-0311 x106

Dyslexia Research Institute <http://www.dyslexia-add.org>

International Dyslexia Association (IDA) www.interdys.org

Larson, N. W. 1998 ed. *SLD Companion Manual*. Department of Children, Families & Learning, State of Minnesota: St. Paul.

Learning Disabilities Association of America (LDA) www.cldinternational.org

LD Online www.ldonline.org

Mather, N. Presentation on Dyslexia. Minneapolis, MN 2000.

PACER Center (Parent Advocacy Coalition for Children's Educational Rights)
PACER@PACER.org

Put Reading First www.nationalreadingpanel.org and www.nifl.gov

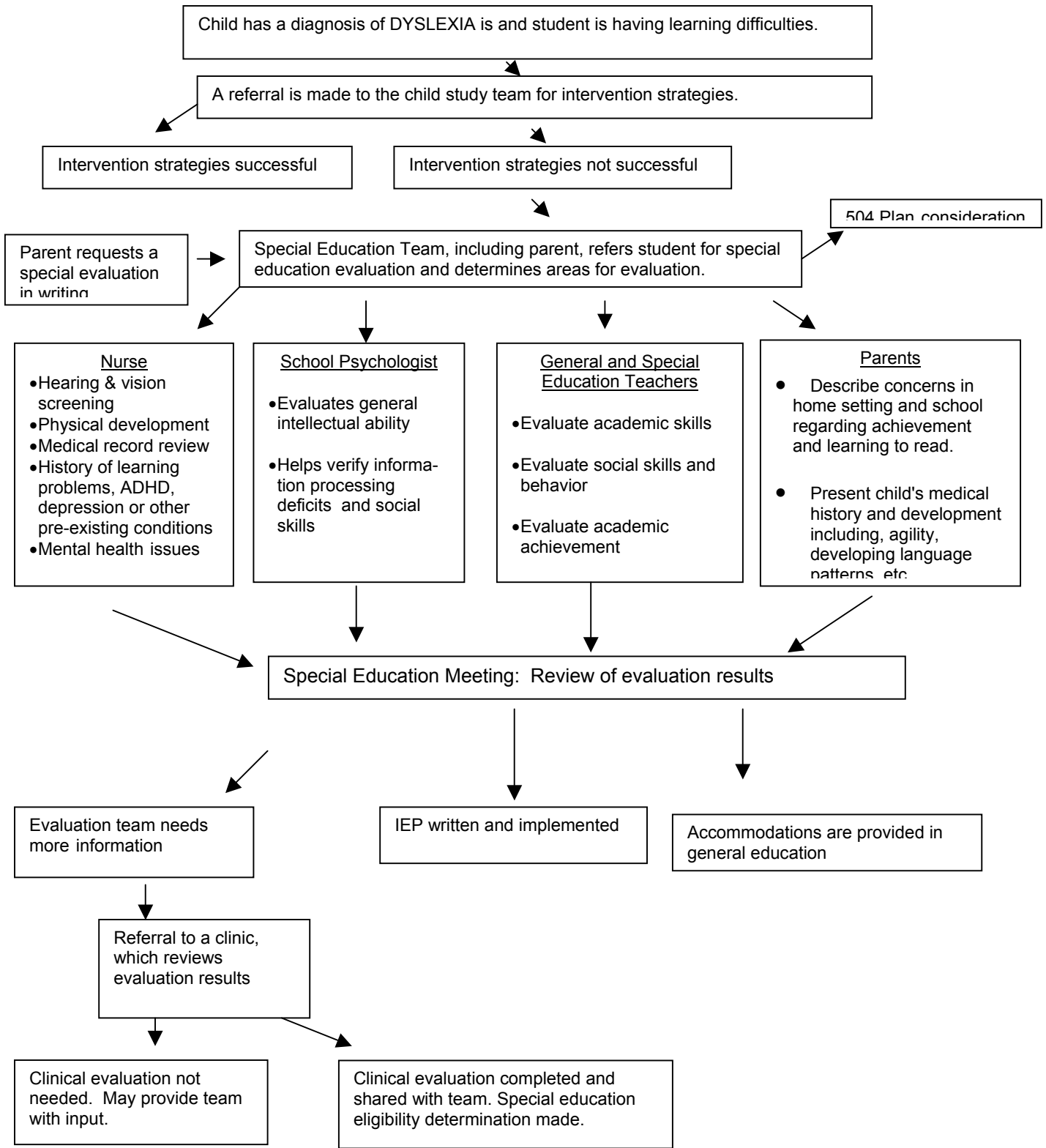
Spafford, C. S. & Grosser, G. S. (1996). *Dyslexia Research and Resource Guide*. Allyn & Bacon: Boston.

Tran, Q.G. (2002). Gene flaw causes dyslexia, researchers say. *The Boston Globe* 7/16/02

Upper Midwest Branch of the International Dyslexia Association
(UMBIDA) (651) 450-7589

Neufeldt, V. & Guralnik, D. B., eds. (1986). Webster's New World College Dictionary Third Edition. USA: MacMillan.

Dyslexia and Special Education



Special Education Evaluation Process -

Prereferral Interventions - Possible Outcomes:

1. General education teacher provides interventions or accommodations in the classroom and the child **is successful** in the educational environment
2. General education teacher provides interventions or accommodations in the classroom and the child **is not successful** in the educational environment;
 - The Teacher Assistance Team (TAT) requests additional interventions for the general educational setting,
or
 - The Special Education Team (sometimes called the Child Study Team) may proceed with a referral for a special education evaluation or 504 plan consideration. The TAT determines if additional evaluation information is necessary based on the student's presenting needs
or
 - Parents request a special education evaluation in writing

Referral for Special Education Evaluation

After the special education team meeting, appropriately licensed team members complete the evaluation. The team must include the following individuals: parents, general education teacher, special education teacher, and a representative from the school district. It may include a school psychologist, learning disabilities teacher, speech-language clinician, nurse, or other special education, teachers. Advocates and clinic representatives may also be included as part of the team.

After the evaluation a team meeting is held, and the team reports their findings and determines eligibility for special education based on Minnesota state criteria. The team may also refer the student for the consideration of a 504 Plan.

Program Determination

Possible options based on the evaluation results:

1. Student **does not meet** state eligibility criteria for special education through SLD or other categorical eligibility criteria. A Section 504 plan may be implemented, or accommodations may be made in general education
2. Student **does meet** eligibility criteria for special education through SLD or other categorical eligibility criteria. An IEP is written and implemented

If, during the team meetings, it is determined that additional information is required, clinic personnel may be consulted.