SLD Companion Manual

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The field of specific learning disabilities (SLD) is synonymous with change, and one cannot hope to capture the essence of this dynamic field within the covers of a manual. Still, as new professional practices and new fields of related research emerge, information contained within manuals quickly becomes outdated. This manual is designed to accommodate this problem with its section by section pagination that allows for periodic replacement materials to be sent to the field.

In response to requests from the field, the manual also includes a section on "ASR and Eligibility" and another on the "IEP and Specially Designed Instruction" that will be further revised this year. The SLD Companion Manual also contains new sections on "Reducing Bias" and "Young Students and SLD." All other sections of the manual received extensive revisions. Recommended tests, forms, and procedures are included in each section as well as Black Line Masters and information on Young Students in Appendix A, Monitoring and Prereferral in Appendix B, and Statistical Information in Appendix C.

The aim of the committees who provided their extensive expertise to this project was to present pragmatic suggestions for improved professional practice and implementation of Minnesota Rule for specific learning disabilities (M.R. 3525.1341). It is our hope that the field finds this manual useful to their practice, relevant for assessment, helpful for students, and reflective of current issues in SLD.

It is with pleasure that the Department of Children, Families & Learning presents the SLD Companion Manual, Revised September 1998, to the field.

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Federal Rules

Individuals with Disabilities Education Act of 1990 (IDEA)

Federal Rule: 34 C.F.R. §300.7 (b)(10) Specific Learning Disabilities means a disorder in one or more of the basic psychological processes involved in understanding and using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. The term includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia.

Federal Rule: 34 C.F.R. §300.541 Criteria for determining the existence of a specific learning disability

A. A team may determine that a child has a specific learning disability if:

(1) The child does not achieve commensurate with his or her age and ability levels in one or more of the areas listed in paragraph (a)(2) of this section, when provided with learning experiences appropriate for the child's age and ability levels; and

(2) the team finds that a child has a severe discrepancy between achievement and intellectual ability in one or more of the following areas:

(i) oral expression;
(ii) listening comprehension;
(iii) written expression;
(iv) basic reading skills;
(v) reading comprehension;
(vi) mathematics calculation; or
(vii) mathematical reasoning

B. The team may not identify a child as having a specific learning disability if the severe discrepancy is primarily the result of:

(1) a vision, hearing, or motor impairment;
(2) mental retardation;
(3) emotional disturbance; or
(4) environmental, cultural or economic disadvantage

Federal Rule: 34 C.R.F. §300.542 Observation

A. At least one team member other than the child's regular teacher shall observe the child's academic performance in the regular classroom setting.

B. In the case of a child of less than school age or out of school, a team member shall observe the child in an environment appropriate for a child of that age.

Federal Rule: 34 C.R.F. §300.543 Written report

A. The team shall prepare a written report of the results of the evaluation.

B. The report must include a statement of—

(1) whether the child has a specific learning disability;
(2) the basis for making the determination;
(3) the relevant behavior noted during the observation of the child;
(4) the relationship of that behavior to the child's academic functioning;
(5) the educationally relevant medical findings, if any;
(6) whether there is a severe discrepancy that is not correctable without special education and related services; and
(7) the determination of the team concerning the effects of environmental, cultural, or economic disadvantages.

C. Each team member shall certify in writing whether the report reflects his or her conclusion. If it does not reflect his or her conclusion, the team member must submit a separate statement presenting his or her own conclusions.

Specific Learning Disabilities

M.R. 3525.1341
Minnesota Interpretation of Federal Rule (1992)

Subpart 1. Definition "Specific learning disability" means a condition within the individual affecting learning relative to potential.

A specific learning disability is manifested by an interference with the acquisition, organization, storage, retrieval, manipulation, or expression of information so that the individual does not learn at an adequate rate when provided with the usual developmental opportunities and instruction from a regular school environment.

A specific learning disability is demonstrated by a significant discrepancy between a pupil's general intellectual ability and academic achievement in one or more of the following areas: oral expression, listening comprehension, mathematical calculation or mathematics reasoning, basic reading skills, reading comprehension, and written expression.

A specific learning disability is demonstrated primarily in academic functioning, but may also affect self-esteem, career development, and life adjustment skills. A specific learning disability may occur with, but cannot be primarily the result of: vision, hearing, or motor impairment; mental impairment; emotional disorders; or environmental, cultural, economic influences; or a history of an inconsistent educational program.

Subpart 2. Criteria The team shall determine that a pupil has a specific learning disability and is in need of special education and related services when the pupil meets the criteria described in items A through C. Information about each item must be sought from the parent and included as part of the assessment data. The assessment data must confirm that the disabling effects of the pupil's disability occur in a variety of settings.

A. The pupil must demonstrate severe underachievement in response to usual classroom instruction. The performance measures used to verify this finding must be both representative of the pupil's curriculum and useful for developing instructional goals and objectives. The following assessment procedures are required at a minimum to verify this finding:

(1) Evidence of low achievement from sources such as cumulative record reviews, classwork samples, anecdotal teacher records, formal and informal tests, curriculum based assessment results, and results from

instructional support programs such as Chapter I and Assurance of Mastery; and

(2) at least one team member other than the pupil's regular teacher shall observe the pupil's academic performance in the regular classroom setting. In the case of a child served through an Early Childhood Special Education program or who is out of school, a team member shall observe the child in an environment appropriate for a child of that age.

Minnesota Rule

B. The pupil must demonstrate a severe discrepancy between general intellectual ability and achievement in one or more of the following areas: oral expression, listening comprehension, written expression, basic reading skills, reading comprehension, mathematical calculation, or mathematical reasoning. The demonstration of a severe discrepancy shall not be based solely on the use of standardized tests. The team shall consider these standardized test results as only one component of the eligibility criteria.

(1) The instruments used to assess the pupil's general intellectual ability and achievement must be individually administered and interpreted by an appropriately licensed person using standardized procedures.

(2) For initial placement, the severe discrepancy must be equal to or greater than 1.75 standard deviations below the mean of the distribution of difference scores for the general population of individuals at the pupil's chronological age level.

C. The team must agree that it has sufficient assessment data that verify the following conclusions:

(1) The pupil has an information processing condition that is manifested by such behaviors as: inadequate or lack of organizational skills (such as in following directions, written and oral; spatial arrangements; correct use of developmental order in relating events; transfer of information onto paper), memory (visual and auditory), expression (verbal and nonverbal), and motor control for written tasks such as pencil and paper assignments, drawing, and copying;

(2) the disabling effects of the pupil's information processing condition occur in a variety of settings; and

(3) the pupil's underachievement is not primarily the result of: vision, hearing, or motor impairment; mental impairment; emotional or behavioral disorders; or environmental, cultural, economic influences; or a history of an inconsistent education program.

Description of SLD Criteria in Minnesota

Federal rule for SLD [34CFR §300.7(b)(10)] *must be interpreted by each state.* Minnesota rule 3525.1341 interprets federal rule. It has three criteria components and a different assessment method for each criteria component. All three SLD criteria components **must be met** at required levels to determine the presence of a specific learning disability.

Severe Underachievement

Part A of the SLD criteria requires each district to determine severe underachievement using methods that are based on best practices and on the specific needs of students in their system. Minnesota rule states that assessment measures must be representative of a student's curriculum and useful for developing Individual Education Program (IEP) goals and objectives. There are multiple data collection methods listed in this section of the rule that are acceptable for this purpose. An SLD observation must be performed by a team member who is not the student's general education teacher in order to relate the student's behavior to severe underachievement.

Severe Discrepancy

Part B of the SLD criteria requires the use of broadly based, standardized, individually administered tests for measuring ability and achievement. The list of tests recommended for this purpose is in Section 5: Severe Discrepany. The scores derived from the assessment process must be verified through other means such as observation and student work. The numerical comparison of standardized test scores must be made using the Minnesota Regression Table.

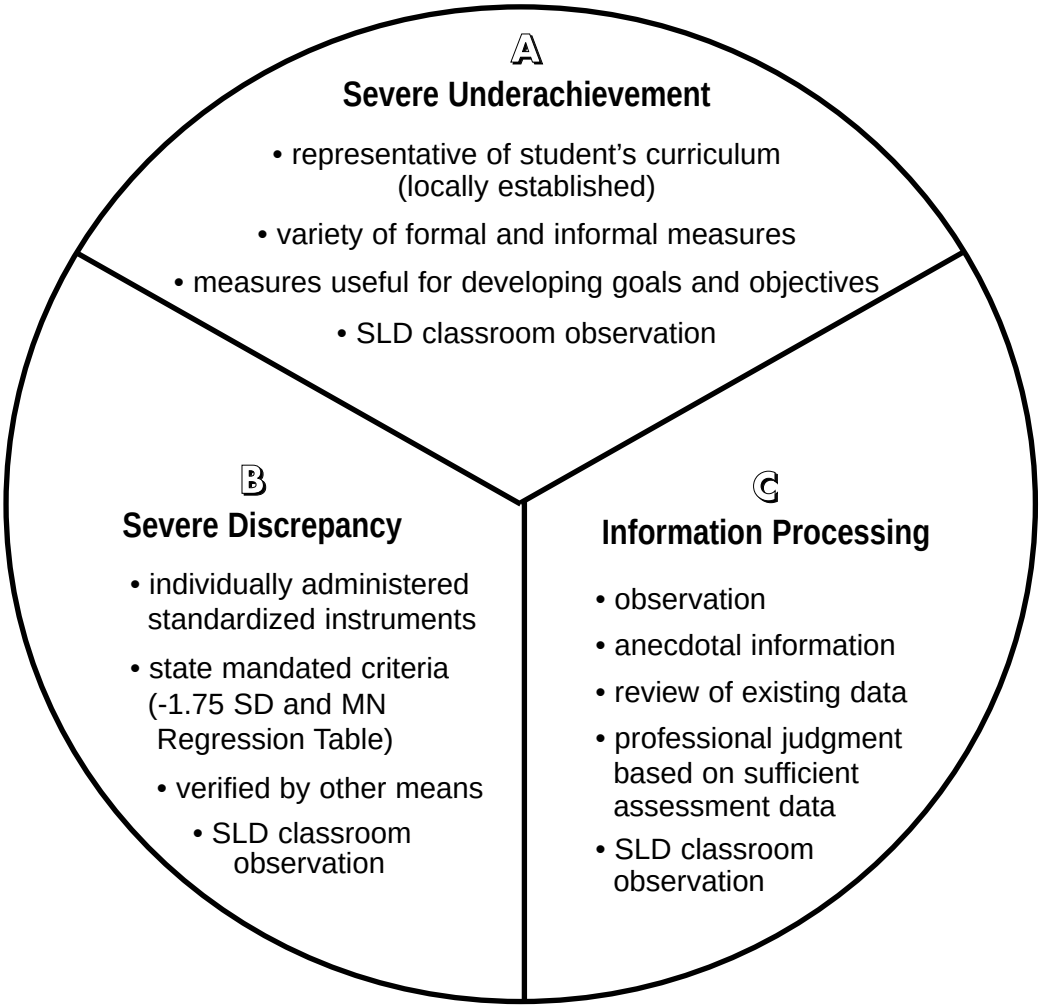
Information Processing

Part C of the SLD criteria is determined through identifying information processing conditions (basic psychological processing problems). This component of the criteria may be assessed through observation, anecdotal information, and record reviews and must be documented in more than one setting. Additionally, assessors may use a professional interpretation of scoring patterns on norm-referenced instruments. Outside assessment reports may contain information processing data gathered through neuropsychological instruments. Recommendations for the definition and assessment of information processing may be found in Section 6: Information Processing.

SLD Criteria in Minnesota

Minnesota

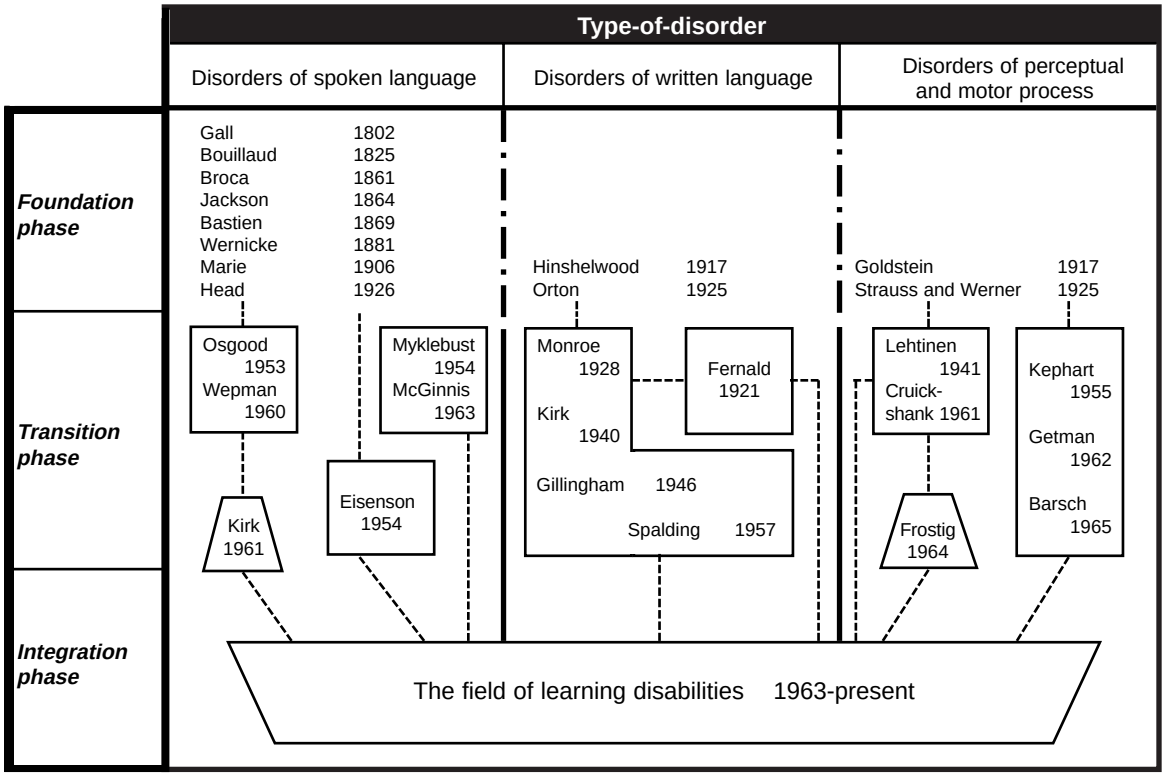
SLD Eligibility Components and Assessment Parameters



History of SLD

The historical roots of identifying children with specific learning disabilities (SLD) may be traced to the early 1800s. Throughout the 20th century many educators, physicians, and psychologists concentrated on this population of children who had specific problems in learning unrelated to sensory acuity or intellectual ability. They conducted research in spoken language, written language, perception, and memory.

Figure 1



Adapted from a visual, two-dimensional representation for the history of the field of learning disabilities (Mann, 1973).

Foundation Phase 1803-1953

During the foundation phase of SLD, theories were developed regarding the nature and causes of specific learning disorders. As can be seen on the chart on the preceding page, some early contributors to this effort were Gall, Wernicke, and Marie. Gillingham (1940) shifted the focus of early theorists and concentrated instead on disorders of written language such as: spelling, composition, and handwriting. Most theorists still concentrated on the investigation of disorders of spoken language.

Transition Phase 1953-1963

The transition phase in SLD was characterized by an effort to translate theoretical positions into remedial educational practices. Some important theorists were Mycklebust, Fernald, Kirk, and Cruickshank. Kephart concentrated on basic perceptual-motor processes while others were interested in assessment and instructional methodology. In addition to investigating disorders of spoken language, some theorists began to explore disorders of written language, perception, and motor processing.

Integration Phase 1963-present

The integration phase of SLD merges the spoken and written language disorders with perceptual-motor dysfunction disorders into a comprehensive diagnostic-remedial approach for children with a variety of specific learning disabilities. During this phase, Dr. Samuel Kirk named the field of learning disabilities and provided the impetus for the Association for Children with Learning Disabilities (ACLD). The field has progressed rapidly since 1963.

Integration Phase 1966-1974

During this time, several national task forces and committees addressed issues in the emerging field of specific learning disabilities. The first report of the National Advisory Committee on Handicapped Children in 1968 stated that only a few of the several million children with SLD were receiving special education services. As a response, the first federal legislation on SLD was enacted in 1969. An amendment to the Education of the Handicapped Act of 1967 authorized the United States Office of Education to establish programs for students with SLD.

Three nationally-sponsored Task Force Reports on SLD were published from 1966 through 1969. The report from Task Force III provided a comprehensive review of research on various central processing dysfunctions (neuropsychological

dysfunctions) in children (Chalfant & Scheffelin, 1969). The report also discussed sensory dysfunctions in analysis and synthesis of information and symbolic operations and provided recommendations for future research.

The field of SLD gained prominence when the Division for Children with Learning Disabilities (DCLD) of the Council for Exceptional Children (CEC) was organized in 1968. National leaders attended an institute sponsored by DCLD in 1971 to discuss SLD teacher training needs and program content. In 1971, Lerner identified the major disciplines contributing to the field of SLD and described how each discipline had approached the field from its own perspective. By 1973, the Bureau for the Education of the Handicapped (BEH) funded Child Service Demonstration Projects (CSDP) in 43 states with the intent of providing quality services to the population of students with SLD.

Integration phase 1975-1990

Programs for students with SLD expanded rapidly as a result of national momentum. Public Law 94-142 in 1975 (amendments to EHA) provided additional impetus and support for the growth of the field. Separate federal regulations for assessing students with suspected SLD were published in 1977.

Federal legislation (Part G of P.L.91-230) required the Bureau for the Education of the Handicapped (BEH) to focus on needed research in the area of specific learning disabilities. Five institutes for research in learning disabilities (IRLD) were funded between 1977-1983, including the University of Minnesota's IRLD. Reports and monographs were disseminated in 1990, providing a body of research literature that is the basis of learning disabilities research and practice today.

Transition phase 1990-Present

The Education of the Handicapped Act was reauthorized in 1990 [called the Individuals with Disabilities Education Act (IDEA), P.L.101–476]. One of the major components of the IDEA reauthorization was the importance placed on parent(s) in directing the education of students with SLD. Family members were empowered as key partners in determining the instructional programs, supports, and related services required to benefit from general education programs. The reauthorization of IDEA in 1997 (20 USC 1414) continues to emphasize the rights of parents.

An increase in the number of students, definition and criteria problems, placement of students with other disabilities into SLD programs, expanding cost, and diminishing economic resources are just some of the factors that now impact the field. It is critical that individuals within the field of specific learning disabilities work together

to responsibly identify and serve students who need specially designed instruction that may not be reasonably provided by general education teachers.

Current Trends in SLD

Over the past five years, researchers have focused on inclusion, gifted students with SLD, and brain and neurological research. Of particular note is the concentration on the increasingly inclusive placement of students with SLD (Maher & Roberts, 1995, Kauffman, 1995, Zigmond & Baker, 1995, and Gerber, 1995). These researchers and others are alarmed about the erosion of the continuum of services for students with SLD and the subordinate role of SLD teachers in co-teaching classrooms. At the same time, the field is still in the process of developing quality inclusive practices in general education classrooms (Adelman, 1992).

Another focus for research is the increasing emphasis on gifted students with SLD, partially fueled by research into autism spectrum disorders that mimic SLD in terms of student characteristics. Efforts are also being made to improve the identification and program development for gifted students with SLD (Tallent-Runnels & Sigler,1995, Brody & Mills, 1997, Dux & Shafer, 1996, Riveria et al., 1995, and Southern et al., 1995).

The recent explosion in brain research is beginning to impact teaching practice and address the differences in brain anatomy and chemistry in students with SLD. Some current findings include insights on causation, hemispheric functioning, writing dysfunctions, dyslexia, and laterality. Overall, there is now scientific support for some SLD characteristics that were previously identified mainly through observation and testing. Other information found in these studies suggests that SLD teachers need to change some teaching practices based on brain research. As time goes on, there will be advances in identifying even more patterns of thinking in students with SLD. It may be possible in the future to correct or prevent some learning disabilities with advances in altering brain chemistry (Shaywitz, Bennett, et al.,1997, Mazzocco, et al., 1997, Williams,1997, Russell,1996, and Powers & Putnam, 1991).

Other trends in SLD research continue in developing more powerful instructional strategies, methods, and improving transition planning. An additional area of research is the correlation of "at risk" factors with SLD such as suspension, expulsion, incarceration, and medical and mental health conditions.

The future of the field of SLD will be shaped by the direction and findings in these and other new research areas.

History of SLD in Minnesota

Over the past 20 years, the state of Minnesota has defined specific learning disabilities using three different models: a psychological processing model (auditory discrimination, visual sequencing, tactile learning, etc.); a discrepancy model (emphasis primarily on severe discrepancy); and the current model that has a three-part criteria for eligibility: severe underachievement, severe discrepancy, and information processing condition.

Minnesota has also had a history of local control and decision-making regarding special education criteria. Before 1991, criteria for SLD were set by local districts with some guidelines and recommendations from the Minnesota Office of Special Education. The differences in criteria in each school district meant that a student could be eligible for services in one district but might not be eligible in another district. In a federal compliance monitoring visit, the disparity in criteria across the state of Minnesota was cited for not being in compliance with federal law and rule, and Minnesota was directed to establish state criteria.

Defining Severe Discrepancy

Nationally, there was controversy about the assessment and criteria for students with suspected learning disabilities. One of the controversies was over the issue of severe discrepancy as a concept in identification of students with SLD.

Most educational psychologists and statisticians indicate that a level of -2.0 standard deviations (SD) below the mean is considered "severe." Input offered from the field through discussion groups and leadership teams concluded that -2.0 SD was too low and would exclude many students then enrolled in Minnesota special education programs for students with SLD. The same groups also felt that -1.5 SD was too high and would result in the addition of many students who were not currently eligible for SLD. The resulting compromise was a level of -1.75 SD of the distribution of the difference scores for the general population of individuals at the student's chronological age level.

Regression Formula

Statewide discussions were held about the merits of using a "flat" or straight line comparison between general intellectual ability and achievement versus the use of a regression formula. The resulting recommendation was to use a regression formula,

which is more reliable than other methods when comparing standard scores from different tests. The value of using various regression formulas was debated and a decision was made to use a state adopted regression formula, adjusted for the relatively low reliability and correlation coefficients in the lower ranges of most standardized tests.

Minnesota Regression Table

In the 1980s, some state regression tables were produced that compared the scores of two instruments; for example, the WISC and the Woodcock Johnson–Revised (WJ-R). At that time, the plan was to produce more tables for other tests. However, the number of tables necessary to account for all possible tests was confusing or impossible and the process was abandoned. The Minnesota Regression Table, based on the state-adopted regression formula, was developed for use with tests that meet the criteria mentioned in Section 5: Severe Discrepancy.

Information Processing

Minnesota Special Education Rule (3525.1341) does not provide a definition for the term "information processing" nor for its six components. Federal Rule uses the term "psychological processes" instead of Minnesota's term "information processing," but does not provide components nor a definition for this term. As a consequence, in 1994, a Minnesota task force developed working definitions for information processing and each of the six components. Definitions from the fields of learning theory and cognitive psychology, as well as dictionary definitions, were considered and then simplified to provide the field with a basis for understanding information processing and its six components.

Minnesota's rules and policies will continue to change as federal requirements, professional research, and new advances impact the field.

Assessment and IDEA '97

IDEA '97 implies that as soon as special education staff are involved in the special education assessment process, parents must be formally notified and involved. Therefore, it is important for the staff and administration in each building to have clearly defined processes for receiving and reviewing referrals. Staff who wear different "hats", i.e., general and special education roles (psychologist/counselor, social worker/counselor, special education teacher/Title I teacher) must know the role in which they are functioning when speaking to the parent(s) and others. In fact, they should declare to others the role they are performing so that due process procedures are not violated. Since IDEA '97 requires parental involvement in the assessment process, the team must involve parent(s) in the process of reviewing existing data.

Assessments are administered by "trained and knowledgeable personnel" and must be multidisciplinary in nature. The team membership must include required members (parents, administrative designee, general education teacher, SLD teacher, or other licensed special education teacher), and may or may not include all of the persons involved in the assessment process. At least one licensed special education teacher or other specialist with knowledge in the area of the suspected disability must be included on this team.

It is required that licensed special education personnel (SLD teacher) and other appropriate professionals conduct the assessment. The team may also include members who may have other responsibilities for implementing the Individual Education Program (IEP). Note: The team conducting the assessment is now called the IEP team.

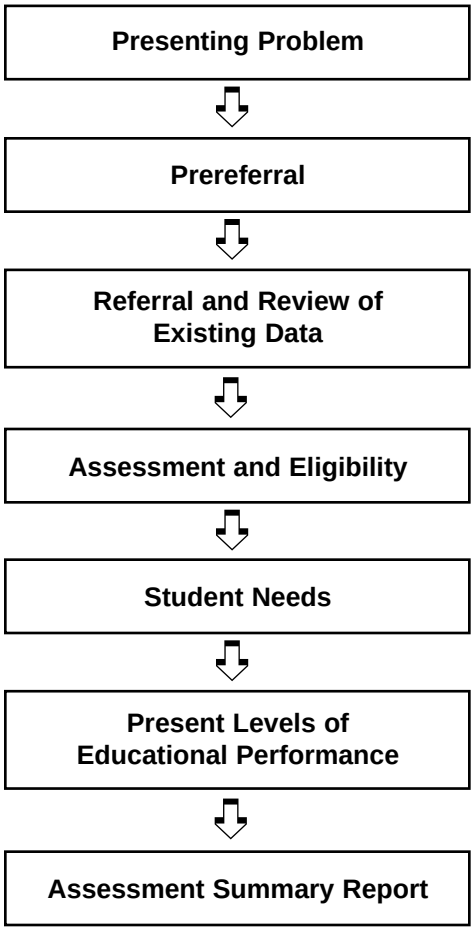
The IEP team should be provided information and/or recommendations to assist in selecting skilled and knowledgeable assessors. An assessor also must have knowledge of age-appropriate communication, academic, information processing, and social skills. Professionals performing an assessment for suspected SLD must be licensed and experienced in teaching and assessing students with SLD.

Purposes of Assessment

The purposes of assessment are:

- to determine eligibility for special education and related services
- to identify specific strengths and areas of need that may be used to plan an appropriate instructional program
- to determine that the student has a specific learning disability (SLD)

Assessment Process



IDEA '97 Definition of Team

IDEA '97 requires the Individual Education Program (IEP) team to conduct assessments, determine eligibility, and develop the IEP. There is no longer a separate multidisciplinary assessment team. The IEP team itself must meet the requirements for the multidisciplinary assessment team when performing this function.

Prereferral

Prereferral Interventions

Once the presenting problem is identified by general education staff, it is necessary to conduct prereferral interventions. Prereferral interventions are planned, systematic efforts by general education staff to resolve apparent learning or behavioral problems. Staff are required to document the design and outcomes of prereferral interventions.

Prereferral interventions are the responsibility of general education teachers with the support and consultation of principals, special education teachers, school psychologists, school social workers, and other specialists. This process is typically conducted by a prereferral team (discussed below). A prereferral team needs to develop criteria and indicators to determine whether or not an intervention is successful. At least two prereferral interventions are required before a special education assessment may be conducted. There may be an exception only if the parent requests an assessment and/or if there is some urgency in the student's situation.

Prereferral interventions need to demonstrate that the instructional approach has actually changed. For example, "got Title I help" would not be an appropriate intervention. Interventions need to have pre- and post-dates for the intervention period, a description of what was done, and for how long.)

Prereferral Teams

General Education Staff

General education teachers can effectively meet some of the needs of many students with learning and behavior problems within the general education classroom setting. Situations arise, however, when a teacher needs a support system to help with students who present unique learning and adjustment problems. Prereferral teams may assist general educators in solving these problems by determining appropriate prereferral interventions. Prereferral interventions help determine if the student's learning problem is specific to the student or a result of the method of instruction or other classroom variables. A prereferral team meeting is particularly important in creating a partnership between the school and family; it is an opportunity to collect information about the student.

Special Education Staff

While special education staff may provide consultation to the prereferral team, their involvement must be minimal because of due process requirements for formal notice to parents when it is perceived that a referral will be made for a special education assessment. This is particularly important given the new IDEA '97 requirements for parental involvement in the special education assessment process.

At prereferral, general education staff has the responsibility of informing the parent prior to seeking the assistance of the prereferral team. They should let the parent know there are concerns and give the parent(s) an opportunity to share information that may have bearing on the student's problem(s). It is conceivable that the general education teacher may gain insight from parents that makes it no longer necessary to refer the student. It is critical that parent(s) are involved early in the process so that trust with the staff and school district is developed and nurtured.

Teacher Assistance Team (TAT)

One name for a prereferral team is the teacher assistance team (TAT), although the name varies from district to district. The historical purpose of this team has been to provide collegial support and assistance to staff who request it. Usually its function is to solve problems surrounding a challenging situation with a particular student. Some of the decisions TAT may make are whether or not a student may benefit from referral to other staff or programs such as Title I, English as a Second Language, Chemical Dependency, Special Education, 504, etc. The TAT's responsibility is not only to refer to other programs but also to generate methods and strategies to assist the teacher in delivering instruction and managing behavior.

At other times, the TAT team can assist the teacher by helping develop interventions the general education classroom teacher must implement, for a specified period of time, in order to document the two necessary interventions before making a referral for a special education assessment. The team must also design a prereferral intervention evaluation system and determine the length of the interventions.

Review of Existing Data

A student must be referred for a suspected specific learning disability through a formal referral process including due process requirements. The referral procedures may vary from district to district, but the essential elements of the process are the same. Review of existing data is the systematic process of collecting and analyzing data to identify a student who is suspected of having a specific learning disability and needs to be referred for a special education assessment. The process identifies all areas to be assessed.

The review of existing data is the first step of required parent involvement under IDEA '97. The team must make a determination, given the presenting problems and data gathered to date, whether a referral for a special education assessment is warranted. If deemed necessary, the student is formally referred for a special education assessment and the parent's written permission is required in order to proceed.

When a specific learning disability or any other disability is suspected, the following domains must be considered when determining the need for assessment.

- intellectual/cognitive functioning
- academic performance
- functional or adaptive skills
- communication
- motor skills
- emotional, social, and behavioral development
- sensory status
- health/physical
- transition areas: employment, post-secondary education and training, community participation, recreation and leisure, home and daily living for students in 9th grade or by age 14

Assessment

Considerations in Assessment

It is always necessary to interpret the performance of a student relative to the:

- Developmental level of the student.
- Potential of the student.
- Number of schools attended.
- Difficulty of the curriculum.
- Speed of response or fluency of the skill.
- Potential for bias in the assessment.
- Skill level compared to peers in same setting.
- Exclusionary factors (vision, hearing, or motor impairment; mental impairment; emotional or behavioral disorders; environmental, cultural or economic influences; or a history of inconsistent education program, limited English proficiency [LEP], or lack of instruction in reading or math).
- Quality and impact of prereferral interventions.

Steps in the Assessment Process

1. Establish team with parents to set direction of assessment.
2. Follow due process requirements for notices.
3. Begin inquiry.
4. Review referral data, prereferral intervention outcomes, and educational history.
5. Choose and administer appropriate assessment measures.
6. Perform systematic observation(s) in one or more general education settings.
7. Evaluate all sources of data for evidence of severe underachievement, severe discrepancy, and information processing conditions and strengths.
8. Determine if further assessment is needed.
9. Verify data from a variety of sources and in a variety of settings.
10. Write Assessment Summary Report (ASR) and include evidence of all three SLD eligibility components.

Standard Assessment Practices

1. It is the responsibility of the team to be familiar with changes in Minnesota and Federal rules.

2. It is the assessor and the team's responsibility to determine if derived scores on an assessment instrument are a valid representation of a student's skills and abilities.

3. If test results seem to conflict with information gathered from the classroom, family, or other historical or anecdotal information, further assessment may be appropriate.

4. The use of a single assessment instrument without corroborating information as the sole basis for the identification of an SLD criteria component is not acceptable.

5. It is possible to use norm-referenced instruments to support the identification of an information processing condition; however, these instruments may not be used as the sole basis for determining the existence of an information processing condition.

6. Assessment goes beyond the administration and scoring of norm-referenced tests. Diagnostic information gained during testing, through classroom observation, interviews, etc., is useful in corroborating a student's intellectual functioning. Typically, an assessor describes the student's approach to a task, test-taking behaviors, willingness to attempt and complete a task, organizational skills, etc., in order to verify a student's functioning.

7. Reporting scores alone in the ASR is not sufficient. A discussion of subtest variability, identification of relative strengths and weaknesses, and task completion is also needed to provide a full report of the information yielded by the assessment process. Being sensitive and aware of the student's mood, motivation, level of tension, and distractibility will also assist in assessing responses and estimating the validity of the results.

   It is the pattern of responses validated by information from other sources that may confirm clinical hunches. It is a combination of these factors, along with test scores, interviews, and observations that enable the team to comprehensively assess the student, determine the student's needs, provide appropriate support, and develop an appropriate IEP.

8. Further information about the learning style of the student may be gleaned by observations and by going beyond the normal parameters of the standardized assessment. "Testing the limits," which involves a deliberate departure from standardized test procedure, is a way to obtain further qualitative information. It should be used by a very experienced and trained assessor only after the test has been completed under standard conditions and may be used as a supplementary source of information (see Sattler, 1988).

Pitfalls in Assessment

Within the SLD assessment process, there are pitfalls that may detract from valid decision-making. These pitfalls may be grouped into student, parent/family, team process, eligibility problems, and criteria for SLD.

Student

Pitfalls

The team may incorrectly determine the student has an SLD because:

- *The student is a person of color, physically unattractive, or has low socioeconomic status or limited English proficiency.*
- *Despite all efforts made by general education teachers, the student persistently fails.*
- *The student needs extra help to catch up academically.*
- *The student is determined to have a specific learning disability because the student is experiencing school difficulties.*

Pitfalls

A student should never be determined eligible for these reasons alone. It is important for team members to be aware of their own biases, expectations, and values. Such influences can interfere with decisions regarding SLD eligibility and placement. While environmental and cultural factors must be ruled out as primary causes of the student's underachievement, culturally or environmentally diverse students should never automatically be included or excluded from SLD eligibility considerations.

Parent/Family

Pitfalls

The team may incorrectly determine the student has an SLD because:

- *Parent(s) or family member(s) say the student has a learning disability.*
- *Parent(s) may lack good parenting skills and may not provide appropriate family leadership.*
- *Parent(s) have had the student assessed privately and the summary report identifies a learning disability.*
- *Parent(s) and their attorney are pressing for special education services; the path of least resistance may be to identify the student with SLD.*
- *Parent(s) request an assessment in writing every year.*
- *Family physician says the student has SLD.*

While the team must consider information from an outside evaluation, it can accept, in part or whole, or reject the information if it has data to dispute the findings. It may be tempting to follow the path of least resistance, but it is important to assess the student's needs and to determine the eligibility for SLD. Two years later the family may file a complaint due to misplacement of their child in SLD. The identification of SLD has long-term consequences–both positive and negative–for the student and the family.

Team Process

Pitfalls

The team incorrectly chooses one or another path because:

- *It does not have enough information from the assessment process, so an SLD determination is not possible. The team gives up, determining the student does not have a specific learning disability.*
- *It keeps digging for more information using less and less reliable instruments until the student is determined SLD because a severe discrepancy could not be established with recommended instruments.*

Pitfalls

Even after a thorough assessment, the team may still decide there is insufficient information to make a decision. They may believe the referral information from the general education teacher was not specific enough or was missing observation reports and student work samples which does not allow them to proceed. There also may be gaps in the educational, medical, or developmental history of the student. Teams should not make decisions based on inadequate or irrelevant data.

According to federal and state special education rules, a student may have a disability or impairment that is not a disability for educational purposes. For example, the student may have a disability (such as ADHD), but may not be in need of special education and related services. However, that same student may be in need of accommodations in a Section 504 plan. It is the responsibility of the IEP team to determine whether the SLD interferes with the student's learning to the extent that special education and related services are necessary for receiving a free and appropriate public education.

On the other hand, if the team has gathered comprehensive data and still cannot identify a specific learning disability, it should include this determination in the ASR and recommend other general education instructional options.

More Pitfalls

A team member may make incorrect decisions because:

- *The expert in SLD (i.e., a school psychologist or SLD teacher) thinks the student truly has a specific learning disability; this opinion carries the most weight in the decision-making process, and the student is determined SLD.*
- *A team member is certain he or she can help the student more than any other teacher in the school and wants to add the student to his or her caseload.*
- *A specific team member is certain the student is not eligible for SLD and lobbies intensively for his or her position.*
- *The "expert" team member is certain the student needs some kind of help that is not currently available in the general education classroom, so the student is determined SLD.*

Pitfalls

The decision-making styles of the team may also become an issue. Variables associated with group processes may impact the decision-making process or the interplay within the team. In some teams, members are comfortable presenting different information or opinions. Teams consist of members from several disciplines who may be influenced by their knowledge in an area of expertise. In other teams, there may be pressure to conform. As a rule, anyone required to attend the team meeting should have something of value to contribute. A team meeting is not merely a perfunctory act.

Eligibility Problems

Pitfalls

The team may make incorrect decisions because the student:

- *Is difficult to teach and "must be eligible for something"; SLD is the most likely service.*
- *Has a behavior problem and doesn't meet eligibility criteria for EBD, so SLD is the next most appropriate category.*
- *Is more than likely mildly to moderately mentally impaired, but there is no way his or her family would accept such a diagnosis; SLD would work just as well, and the family would accept that label.*
- *Must be made eligible for SLD because it is the only way to remove the student from the general education classroom.*
- *Is not eligible since the SLD teacher already has 30 students on his or her caseload and cannot accept any more.*

- *Is an underachiever, so he or she is eligible for SLD.*
- *Performed poorly on the standardized achievement test, so the student is eligible for SLD.*

Good decision-making regarding eligibility for SLD requires the collection of organized and comprehensive educational assessment data. The basic makeup of the team is designed specifically for the purpose of providing comprehensive, quality expertise in the decision-making process. Again, a single team member may not make the decision regarding eligibility for SLD.

Pitfalls

Criteria for SLD

Pitfalls

Teams may make incorrect decisions because:

- *The student is two grade levels below grade expectancy and needs to be found eligible for SLD to receive remedial services.*
- *All that is needed is a difference of two stanine scores on group standardized tests of ability and achievement to make a determination of SLD.*
- *The -1.75 standard deviation translates into 26 points, and the team doesn't need to take the time to consult the tables. A student exhibiting a 26-point spread is automatically eligible for SLD.*
- *Without regard for SLD eligibility criteria, a team labels the student SLD to get the student into special education so extra help can be provided.*
- *The school psychologist reports there is a discrepancy between Verbal and Performance IQ scores or between subtest scores, so the student is eligible for SLD.*
- *The higher of the Verbal or Performance IQ scores makes the -1.75 standard deviation cutoff, so use the score that makes the cutoff for SLD.*

The team should guard against being influenced by the availability of services or by the need to increase the number of students to justify a teaching position. It is unethical for an team to identify a student with SLD when the data do not support such a decision.

The placement determination is the last activity in the development of an IEP. The team, after determining if the student has a specific learning disability, must also determine if the student is in need of services and identify which services are appropriate.

Special education and related services decisions are driven by the student's assessed needs, present levels of educational performance, and need for special education and related services.

As groups interact, some individuals may be more vocal or more knowledgeable than others. The determination that a student has a specific learning disability and is in need of special education and related services is a team responsibility even when there is no more space available in special education programs within the district.

Assessment data will assist the team to distinguish between a student with SLD and a slow learner or low achiever. There must be assessment evidence that the student's academic deficits are related to problems in basic psychological processes (information processing). Information processing refers to the way the student stores, organizes, acquires, retrieves, expresses, or manipulates (SOAR'EM) information.

There are some students who do function at or above grade level and have a specific learning disability. These students may also qualify for gifted and talented programs and are sometimes called "twice exceptional."

Override Procedures

In rare cases, the team may depart from the recommended standardized instruments or procedures in determining that a severe discrepancy exists and override procedures must be followed. The following must be documented (M.R. 3525.1354, Subp. 1).

1. An explanation in the ASR of why the standards and procedures that are used with the majority of students resulted in invalid findings for the student.
2. An indication of the objective data used to conclude that the student has a disability and is in need of specialized instruction, which may include the following:
   - test scores
   - work products
   - self-reports
   - teacher comments
   - previous assessments
   - observational data
   - ecological assessments
   - other developmental data
3. An indication of which data has the greatest relative importance for the eligibility decision based on a synthesis of multiple data sources assuming that not all data sources provide equally valid information.
4. The team members must sign the ASR agreeing to the override decision. For those team members who disagree, a statement of why they disagree with their signature must be included. There must be documentation of all three SLD eligibility components in the ASR.

The next three sections of this manual specifically deal with each SLD criteria component.

Severe Underachievement (Part A)

Before a team assesses for severe underachievement, two prereferral interventions must be implemented and evaluated in the area of presenting problem. Then one or more of the following seven academic areas of functioning must be identified and a classroom observation must be performed when determining there is severe underachievement.

Areas of Underachievement

- basic reading skills
- reading comprehension
- mathematical calculation
- mathematical reasoning
- written expression
- oral expression
- listening comprehension

This does not mean all the listed academic areas must be assessed. The team is required to assess only in the area of presenting problem and the areas required for SLD eligibility. The pattern of severe underachievement the student exhibits must be documented and analyzed.

Underachievement Measures

Based on Minnesota rule [3525.1341 Subp.2(A)] severe underachievement assessment measures must be representative of the student's curriculum and useful for developing goals and objectives. A district or building must develop a policy regarding the specific documentation necessary to establish "severe underachievement." Minnesota rule lists the following measures as appropriate for use in making this determination:

- cumulative record reviews
- anecdotal teacher records
- classwork samples
- formal and informal tests
- curriculum-based assessment results
- results from instructional support programs such as Title I (Chapter I)

The Underachievement Checklist on the next page may be helpful in recording initial information about a student's underachievement during the review of existing data. Assessment measures chosen from the list above may be used, as well as diagnostic tests and academic skills inventories, in determining severe underachievement.

Initial Underachievement Checklist

In order to establish a pattern of severe underachievement it is necessary to gather data in a review of existing data. Sometimes this information is already recorded on a district prereferral or referral from. If this is not the case, the following form may be used to record information about the student's history of severe underachievement.

Student's Name _____ Grade _____ Birth Date _____

General Education Teacher _____ Date _____

Assessor _____

Assessment of Performance

- ❑ General education teacher's assessment of the student's daily work reveals a relative lack of quality and depth on a consistent basis.
- ❑ Performance-based measures indicate a lack of achievement over time.
- ❑ Records and reporting systems show a pattern of poor achievement.
- ❑ Family members express concern that the student is not achieving to potential. Examples:
- ❑ The student expresses frustration with his or her achievement in academics, comprehension, following directions, completing assignments, building and maintaining friendships, etc.
- ❑ Standardized group and/or individual achievement test results are in the low range of academic achievement.

Group Achievement Test(s)	Stanine	Percentile Ranking	Grade Equivalent

Classroom work

- ❑ The quality and depth of work is below expectations for this student when compared to his or her peers.
- ❑ Classroom work is completed carelessly or too quickly.

Classroom work demonstrates:

❑ poor understanding ❑ superficial knowledge ❑ lack of understanding

SLD Observation

Another requirement for documenting severe underachievement is an observation of the student's performance in the classroom. An SLD observation must relate the student's behavior to the severe underachievement. It is important to target the presenting problem and systematically observe for specific behavior in the context of the rest of the class (i.e., Is 50 percent of the class off task? 25 percent? Is the observed student the only one off task?)

The classroom observation must:

- Relate to the reason(s) for referral.
- Describe how the student performs in the area(s) of suspected underachievement compared to other students.
- Be conducted by someone other than the student's general education teacher.
- Verify severe underachievement, severe discrepancy, and information processing.
- Verify teacher perceptions of the presenting problem.
- Assist in decision-making for eligibility.
- Cross-validate observations made by clinicians or teachers in other settings.
- Assist in identifying target areas for developing goals and objectives.
- Describe the student's functioning level in large and small group settings.
- Identify the student's difficulties with processing information.
- Relate observed behavior to the student's academic functioning.

SLD Observation Form

The following SLD Observation Form may be used to record observations by rating the student in each of the areas listed. If a behavior is not observed, place a check in the box for "Not Observed"; add any comments that might further clarify the rating. Review the referral form, noting areas of presenting problem(s) and describe the type of classroom setting.

Make note only of observed behaviors or specific performance; avoid interpretations about why the student is or is not performing in a particular manner. Avoid using phrases such as “I feel,” “I believe”, or “I think”. Use definitive terms such as “The student copied problems from the text for five minutes without interruption and without assistance.”

If appropriate, include dialogue between the student and teacher, peers, or paraprofessional. Also, comment on any other relevant behaviors observed but not otherwise addressed.

Finally, consult with the general education teacher to determine if the behaviors observed were typical of the student during this type of activity. If the observation is atypical of the student, another observation may need to be performed at another time or in another setting.

SLD Observation Form

(Performed in the context of the general education classroom)

Student's Name _____ Grade ____ Birth Date _____

General Education Teacher _____ Date _____

Class _____ Student/Teacher Ratio _____

Assessor _____ Beginning Time _____ Ending Time _____

Reason(s) for Referral _____

Setting (describe) _____

Task (describe) _____

Check the observed level of the student's functioning. Please use reverse side for more specific comments or relevant dialogue.

Academic Areas	No problem	Some Problem	Significant Problem	Not Observed	Comments
Basic reading skills	❑	❑	❑	❑	
Reading comprehension	❑	❑	❑	❑	
Mathematical calculation	❑	❑	❑	❑	
Mathematical reasoning	❑	❑	❑	❑	
Written expression	❑	❑	❑	❑	
Oral expression	❑	❑	❑	❑	
Listening comprehension	❑	❑	❑	❑	

Behavior	No problem	Some Problem	Significant Problem	Not Observed	Comments
Hyperactive	❑	❑	❑	❑	
Hypoactive	❑	❑	❑	❑	
Impulsive	❑	❑	❑	❑	
Distractible	❑	❑	❑	❑	
Perseverative	❑	❑	❑	❑	
Disruptive	❑	❑	❑	❑	
Uncooperative	❑	❑	❑	❑	
Impaired social interaction	❑	❑	❑	❑	
Overly compliant	❑	❑	❑	❑	
Other relevant behavior	❑	❑	❑	❑	

SLD Observation Form

Information Processing	No problem	Some Problem	Significant Problem	Not Observed	Comments
Follows directions (S)	❑	❑	❑	❑	
Remembers visual material (S)	❑	❑	❑	❑	
Remembers auditory material (S)	❑	❑	❑	❑	
Brings classroom materials (O)	❑	❑	❑	❑	
Begins task promptly (O)	❑	❑	❑	❑	
Completes assignment (O)	❑	❑	❑	❑	
Uses planning skills (O)	❑	❑	❑	❑	
Understands visual material (A)	❑	❑	❑	❑	
Comprehends information (A)	❑	❑	❑	❑	
Recalls information (R)	❑	❑	❑	❑	
Responds in timely manner (R)	❑	❑	❑	❑	
Uses strategies to recall (R)	❑	❑	❑	❑	
Writes legibly (E)	❑	❑	❑	❑	
Participates in class (E)	❑	❑	❑	❑	
Demonstrates fluency in speech (E)	❑	❑	❑	❑	
Applies information (M)	❑	❑	❑	❑	
Makes inferences (M)	❑	❑	❑	❑	
Interprets information (M)	❑	❑	❑	❑	

S = Storage, 0 = Organization, A = Acquisition, R = Retrieval, E = Expression, M = Manipulation of information

Indicate how the observed behavior relates to the student's academic functioning.

Does the general education teacher think the observation period is representative of typical behavior for this student in the classroom? ❑ Yes ❑ No

Other comments and observations:

Home and Family Interview

It is required by IDEA '97 to have parent input in the assessment process. Parent information is to be obtained for all three SLD criteria areas. The following Home and Family Interview is designed to gather input from parents in the areas of severe underachievement, severe discrepancy, and information processing. This form has been extensively piloted in selected school districts in Minnesota. A team may add or delete questions or add other information to the interview form. Please note there are sections in this interview that pertain to SLD exclusionary factors (see Section 8: Exclusionary Factors).

Home and Family Interview

Dear Family Member,

The purpose of this form is to gather information from parents about your observations of your child and other issues that may affect your child's school performance. The information you provide must be included as part of the assessment for your child. Your ideas and concerns are important to the assessment process and will be summarized in the Assessment Summary Report (ASR). Use additional paper if more room is needed when answering these questions.

Student's Name _____ Grade _____ Birth Date _____

General Education Teacher _____ Date _____

Assessor _____

School _____

Parent(s) _____

❑ Mail ❑ Personal interview with: ❑ Phone interview with:

Student lives with	Persons living in the student's home		
❑ Parent(s) ❑ Foster parent ❑ Relative ❑ Peers ❑ On own ❑ Other	Name	Relationship to child	Age
	Family members not present in the home		
	Name	Relationship to child	Age

1. Does your child have any medical, physical or psychological conditions? Please check all that apply even if they are not currently present. For items checked, please provide an explanation. Indicate medication if applicable.

	Medication	Explanation
❑ Vision		
❑ Hearing		
❑ Attention Deficit Disorder		
❑ Head Injury		
❑ Asthma		
❑ Allergies		
❑ Diabetes		
❑ Depression		
❑ Cerebral Palsy		
❑ Seizures		
❑ Other		

2. Does anyone in your family have a history of medical or physical problems?
❑ yes ❑ no If yes, please explain:

3. Has anyone in your immediate or extended family had academic or educational problems? ❑ yes ❑ no If yes, please explain:

4. Were there any unusual complications during the pregnancy or birth of this child?
❑ yes ❑ no If yes, please explain:

5. Were the developmental stages such as walking, sitting, etc. for this child within normal ranges? ❑ yes ❑ no If no, please explain:

6. Many learning problems in childhood are temporary and may be brought on by changes in the life of a child and his or her family. Indicate which of the following events have occurred in your family. *(Check all that apply.)*

Event	Year	Describe
❑ Move to a new home		
❑ Change of school		How many time in the year stated? How many times total?
❑ Repetition of grade		
❑ Serious illness in family		
❑ Death in family		
❑ Divorce/separation of parents		
❑ Change in hours parent(s) are home		
❑ Loss of job		
❑ Parent began work out of home		
❑ Brother or sister left home		
❑ Marriage of brother or sister		
❑ New person joined family		Who?
❑ Neighborhood concerns		
❑ Chemical or alcohol use		When? Ongoing?
❑ Homelessness		
❑ Foster home placement		
❑ Court placement		
❑ Involvement with the law		
❑ Family member in counseling		Ongoing?
❑ Other		

7. What are your child's current school problem(s)?	When did you first notice them?	What do you think caused them?

8. Do you feel your child's school problem(s) is (are) the result of a cultural or other misunderstanding? ❑ yes ❑ no If yes, please explain:

9. Have you tried anything to help your child at home such as reading aloud, sitting with your child at homework time, etc.?

10. How do you think other people (relatives, neighbors) view your child?

11. Has repeating a grade ever been considered for your child?
❑ yes ❑ no If yes, please explain:

12. In your opinion, what can the school staff do to be most helpful to your child at this time?

13. Share the strengths and special abilities of your child.

14. Describe the way you've seen your child learn best. Give an example.

15. Describe something your child has learned easily in the last three months.

16. Describe something your child had difficulty learning in the last three months.

17. What information would you like to receive from this assessment?

18. How many days a week does your child *have* homework? _____

    How many days a week does your child *do* homework? _____

    How long does he or she spend on homework each day? _____
    (minutes or hours)

    Does your child complete homework independently, or does your child need your assistance?

19. How would your family life change if your child no longer had the school problem(s)?

20. Rate your child's performance at home or in the community on the following items:	Does very well	Occasionally requires parent assistance	Always requires parent assistance	Not applicable
Follows two- to three-step directions (S)	❑	❑	❑	❑
Remembers (S)	❑	❑	❑	❑
Organizes (O)	❑	❑	❑	❑
Uses planning skills (O)	❑	❑	❑	❑
Understands what he or she reads (A)	❑	❑	❑	❑
Understands what he or she sees (A)	❑	❑	❑	❑
Understands what he or she hears (A)	❑	❑	❑	❑
Learns a new game (A)	❑	❑	❑	❑
Recalls events from the school day (R)	❑	❑	❑	❑
Recalls specifics from a special event (R)	❑	❑	❑	❑
Reads aloud (R)	❑	❑	❑	❑
Carries on a conversation (E)	❑	❑	❑	❑
Handwrites (E)	❑	❑	❑	❑
Solves problems (M)	❑	❑	❑	❑
Explains something he or she learns (M)	❑	❑	❑	❑
Assembles or repairs things (M)	❑	❑	❑	❑
Demonstrates artistic ability (M)	❑	❑	❑	❑
Knows basic math facts (R)	❑	❑	❑	❑

S = Storage, 0 = Organization, A = Acquisition, R = Retrieval, E = Expression, M = Manipulation of information

Thank you for your input!

Severe Discrepancy (Part B)

The second component of severe discrepancy is very specific about the difference in scores necessary to determine a severe discrepancy between general intellectual ability and achievement. The required level is -1.75 standard deviations (SD) below the mean of the distribution of difference scores for the general population of individuals at the student's chronological age. The severe discrepancy must be established in one of the following areas (same areas as for severe underachievement).

- basic reading skills
- reading comprehension
- mathematical calculation
- mathematical reasoning
- written expression
- oral expression
- listening comprehension

A severe discrepancy must be determined with individually administered standardized tests using standard procedures. Both general intellectual ability and achievement levels must be assessed with these practices. When the standardized assessment is complete, the Minnesota Regression Table must be used to determine a severe discrepancy; it is included at the end of this section. A subtest, a screening instrument, or diagnostic test score may not be used to calculate a severe discrepancy.

Assessment of General Intellectual Ability

General intellectual ability is a student's general overall capacity to adapt and function in the environment. It includes not only the student's cognitive abilities in school, home, and social relationships, but also his or her intellectual ability as estimated from individually administered standardized ability tests.

An assessment of general intellectual ability is the responsibility of a licensed school psychologist who makes a responsible and accurate estimate of the student's general intellectual ability. Data and test results used to make eligibility decisions must be evaluated in light of the student's developmental, psychological, and family histories as well as home and school environmental influences.

Interviews, observations, and developmental histories supplement and validate results from standardized intellectual ability tests. Family members and general educators can provide valuable information about the student's abilities that may not be obvious from test scores. The trained, licensed assessor with specific knowledge, training, and appropriate licensure must administer and score the test and, along with the team, synthesize additional information and interpret the results.

Careful interpretation of the testing results by a school psychologist is critical. In some cases, the derived IQ score may not accurately reflect the general intellectual ability of a student. For example, a student may have low motivation, low self-esteem, inattentiveness, cultural and linguistic differences, or may fail to follow or comprehend the directions, resulting in a low score. It is the responsibility of the assessor to summarize test scores and then interpret the results along with the team in the Assessment Summary Report (ASR).

In rare instances, there are situations when a student's derived scores are not a reasonable estimate of general intellectual ability and may not represent the student's intellectual functioning. For example, language-based disabilities may preclude an accurate estimate of intelligence. Also, general intellectual ability scores may not provide a reasonable indication of ability level in students with extreme variations in cognitive performance. In these cases, using a supplemental test of intellectual ability or a supplemental procedure is recommended (see *Reducing Bias in Special Education Assessment for American Indian and African American Students*, Minnesota Department of Children, Families & Learning, 1998).

Wechsler Scales Verbal Performance Split

Teams should not establish a policy on the basis of certain numerical differences between Verbal and Performance IQ scores regarding the use of a score other than the Full Scale IQ score when determining a severe discrepancy. The decision to use either a Verbal or Performance IQ score must be made on a case-by-case basis and careful thought must be given as to why the Full Scale IQ score is not representative of the student's general intellectual functioning.

If the team determines the Full Scale IQ score is not valid, the next question for the team to ask is whether or not either the Verbal or Performance IQ score is representative of the student's overall intellectual functioning. In some rare cases there may be a significant and unusual difference between the Verbal and Performance IQ scores, and either the Verbal or Performance IQ score may be used instead of the Full Scale IQ score. Supplemental measures of intellectual ability or other procedures may be needed to verify findings.

Research on the magnitude of the difference between Verbal and Performance IQ scores that results in an "unusual verbal performance split" is complicated. Studies cite that a 20-point difference is expected in populations of students with SLD. Differences of up to 15 points are found even in the general education population,

and differences of 10 points are common in the general population. A Verbal/Performance split must be not only statistically significant, but unusual, to be meaningful for decision-making purposes.

It is recommended that the Individual Education Program (IEP) team write an override justification if it is not possible to determine whether the Verbal, Performance, or the Full Scale IQ score is representative of a student's intellectual functioning and whether the other SLD criteria components are met (information processing deficit and severe underachievement). In all other cases, the Full Scale IQ score must be used to compute severe discrepancy.

Should the student not be found eligible for special education services, the data gathered on intellectual ability may be used by general educators and parents to assist in planning for the student in general education.

Scores of Less Than 75

The Minnesota Regression Table may not be used with standard scores on measures of general intellectual ability of less than 75 for two reasons. First, there is a general concern in the field that the correlation between tests and the reliability of individual tests is low at a level greater than two standard deviations from the mean, making the statistical comparison difficult.

Second, the effects of mental impairment on achievement must be discussed and ruled out as the primary reason for a student's underachievement (see Section 8: Exclusionary Factors). The IEP team must discuss general academic expectations for a student with low ability. Ruling out the effects of a mental impairment on achievement is difficult. IEP teams may not extend the Minnesota Regression Table to include lower scores. The scores on the Minnesota Regression Table are computed using a regression formula (see Appendix C). Scores of 75 or lower require an override.

Selecting an Instrument

When determining the most appropriate assessment instrument for a student, refer to the norming information in the technical manual for that specific instrument and to the *Standards for Educational and Psychological Tests* (American Psychological Association), 1995, to ensure the test is normed for a population with characteristics similar to those of the student in question. If the assessor uses the *Stanford Binet*, the con-

version chart found in Appendix C must be used. Conversion of scores is necessary because the *Stanford Binet* has a standard deviation of ±16, not ±15 for which the Minnesota Regression Table is designed.

For students with cultural and/or language differences and for whom a traditional intellectual ability measure may not be valid, it is recommended to use the assessment practices suggested in Section 7: Reducing Bias in Assessment and *Reducing Bias in Special Education Assessment for American Indian and African American Students*, MCDFL, 1998. A listing of nonverbal assessment instruments may be found in Reducing Bias. Another resource is the *Resource Handbook for the Assessment and Identification of LEP Students with Special Education Needs, 1991*, which may be obtained through Minnesota Educational Services (phone 1-800-652-9024). Even though somewhat dated, the procedures are sound and may be followed with confidence.

Recommended General Intellectual Ability Instruments

Note: The following instruments are recommended by the SLD assessment committee for use with the Minnesota Regression Table because they are broad measures of general intellectual ability and are normed across a wide age range of subjects. When making discrepancy calculations, use only the Full Scale IQ score or Broad Cognitive Ability score from the following instruments.

Differential Abilities Scale (DAS) *(Psychological Corporation)*

Kaufman-Adult and Adolescent Intelligence Test (K-AIT)
Kaufman-Assessment Battery for Children (K-ABC)
(American Guidance Services)

Stanford Binet IV (using conversion chart—see preceding paragraph)
(American Guidance Services)

Wechsler Intelligence Scale for Children III (WISC III)
Wechsler Pre-School and Primary Scales of Intelligence III (WPPSI-III)
Wechsler Adult Intelligence Scales III (WAIS III)
(Psychological Corporation)

Woodcock-Johnson-Revised, Tests of Cognitive Ability (WJ-R)
(Riverside Publishing)

Assessment of Achievement

All initial referrals for SLD assessment require the use of individually administered standardized tests in broad academic areas.

The purpose of assessing a student's academic functioning is:

- To determine the degree to which the SLD impairs a student's ability to function in school.
- To provide information for educational programming and specially designed instruction.
- To determine whether or not SLD eligibility criteria are met at the required levels.
- To assist in developing appropriate IEP goals and objectives.

Individually administered standardized test scores must be verified by information gathered from performance-based measures, diagnostic tests, observations, and/or other methods. Since reasons for a student's low performance on a standardized test vary, it is also important to use procedures to reduce bias in the assessment of achievement.

In assessments for suspected SLD, one or more of the seven areas of achievement listed at the beginning of this section must be assessed.

Assessment Procedures and Test Selection

It is required by Minnesota rule that standardized individually administered achievement tests be given by a trained licensed professional, usually an SLD teacher, who is knowledgeable and follows professional practices regarding test selection, validity, and reliability. Data on student achievement must also be gathered from sources other than standardized tests. Anecdotal information from parents and general education teachers, diagnostic, curriculum, and other performance based measures may provide better information for developing IEP goals and objectives.

The assessor should choose tests carefully on the basis of the relative advantages of using an instrument (access, strength or norms, validity, etc.) while being mindful of the limitations of the test (format, timing, etc.). Assessors should also keep in

mind the individual student responses to the format of various achievement tests. For example, the "cloze" or other procedures may be difficult for non-standard English speakers as measures of reading comprehension. In another situation, a student may be reluctant to read aloud thus making it difficult to accurately assess reading fluency. The student's responses in these situations may be related to his or her cultural background rather than to his or her actual achievement level.

Test Procedures

Standardized tests must be given following standard protocols and recommended procedures as part of professional practice to ensure valid derived scores. The same requirements apply to gathering information from other sources. Any alterations to standard test format, directions, or procedures invalidate the testing conditions and the changes must be noted in the ASR. **Test scores derived from using the altered directions, procedures, or conditions are not considered valid but may nonetheless provide the team with valuable qualitative data that reflect the student's achievement level under differing conditions.** The scores derived from altered procedures may not be used to calculate a severe discrepancy for SLD eligibility. There are certain exceptions when performing assessments of students with LEP. It is important in these cases to follow the recommended procedures outlined in the *Resource Handbook for the Assessment and Identification of LEP Students with Special Education Needs*, (1991).

Note on Group Tests

It is important to note that group administered achievement tests, including Minnesota Basic Standards and Statewide Testing, do not have the sensitivity and are not intended to be adequate either for specific eligibility criteria or for writing IEP goals and objectives.

Administering Achievement Tests

The assessor should identify the broad academic areas that must be assessed based upon the review of existing data. In most cases, the assessor will begin the assessment with one or more standardized instruments to identify broad areas of strength and weakness, and then assess further with additional assessment procedures and tests. In all cases assessors should administer the most recent version of the instrument. The assessor must be trained to administer and interpret the specific assessment test.

Recommended Achievement Instruments

The following tests are recommended by the SLD Assessment committee because they fit the criteria below:

- whole person or broad picture concept of achievement
- appropriate age ranges in norming samples
- mean standard score of 100, standard deviation of ±15

Reviews of each of these instruments are included in the latest editions of *Assessment in Special Education* (Salvia & Ysseldyke,1988) Sattler's (1988) *Assessment of Children's Intelligence and Special Abilities*, and in other similar references.

Clinical Evaluation of Language Fundamentals 3 (CELF 3) *(Psychological Corporation)*
Usually administered by a speech/language pathologist

Standard Scores for:
- Receptive Language (Listening Comprehension)
- Expressive Language (Oral Expression)

Kaufman Test of Educational Achievement, Comprehensive Version (KTEA)
(American Guidance Services)

Composite Scores only:
- Mathematics
- Reading

Oral and Written Language Skills - (OWLS) *(American Guidance Services)*
Administered by either a trained SLD teacher or speech/language pathologist

Standard Scores for:
- Oral Expression
- Listening Comprehension

Wechsler Individual Achievement Test (WIAT) *(Psychological Corporation)*

Composite Scores only:
- Reading
- Language
- Mathematics
- Writing

Woodcock-Johnson-Revised, Tests of Achievement (WJ-R) *(Riverside Publishing)*

Standard Scores for:

Broad Clusters		Basic Skills Clusters		Applications Clusters
• Broad Reading	*or*	• Basic Reading Skills	*or*	• Reading Comprehension
• Broad Mathematics		• Basic Math Skills		• Mathematics Reasoning
• Broad Written Language				• Written Expression

Cautions in Determining Severe Discrepancy

Periodically, new tests will be developed. They will need to be analyzed to determine that they are valid reliable instruments for eligibility decisions (not screening instruments), normed on the appropriate population, etc. When a test is renormed, best practice suggests that assessors have approximately one year to begin using the new version of the test.

The results of achievement tests must be interpreted and reported on the ASR. It is unlikely that the instruments used for this part of the SLD eligibility determination assessment will provide the information necessary to write goals and objectives. The more specific information necessary for this purpose should be available from assessing for severe underachievement.

Some teams continue to use practices in computing a severe discrepancy that are no longer acceptable or have been rescinded at the state level by policy memos. They are listed below.

Teams:

- MAY NOT use a flat comparison of either a point difference or a grade level difference between intellectual ability and achievement scores; the Minnesota Regression Table MUST be used.
- MAY NOT use a ±5 standard error of measurement of tests of achievement or ability to determine cutoff scores. In practice this alters the -1.75 standard deviation (SD) requirement to approximately -1.30 SD.
- MAY NOT choose the higher of the Verbal or Performance IQ scores on the Wechsler Intelligence Scales to establish a severe discrepancy: a Full Scale IQ score or broad cognitive ability score is required.
- MAY NOT use the scoring diskette developed for use with the WISC III, WPPSI III, WAIS III, and the WJ-R Tests of Achievement with any other tests. There are many technical difficulties with this disk that preclude its use by most teams (cannot be used on a network, requires a dot matrix printer, etc.)

Minnesota Regression Table

Generally, in determining a severe discrepancy consistent with state criteria, the Minnesota Regression Table is used. Previous practice has been to assume a .62 correlation and use only that column to determine discrepancy. A better and more accurate practice is to identify and use the appropriate correlation for the specific ability test and the achievement test used in the assessment.

Step 1: Find the correlation between the ability and achievement tests administered to the student. Such information will usually be available at different age levels in the technical manuals provided by the test publishers. It is helpful to consult with someone who is well versed in the technical aspects of tests, such as a school psychologist to locate the information. If a specific correlation is not available, use the .62 correlation column.

Step 2: In the left hand column, locate the student's ability score and then find the correlation column closest to the correlation for the tests you are comparing. If you are using the *Stanford Binet*, please use the conversion chart found in Appendix C. Conversion is necessary because the *Stanford Binet* has a standard deviation of ±16, not ±15 for which the Minnesota Regression Table is designed.

Step 3: If the student's achievement score (standard score) is equal to or less than the score reported in the correlation column, then the student's discrepancy is considered severe and meets this part of the SLD eligibility criteria.

Caution: This is just one of three criteria for SLD eligibility. The team must also verify and document the presence of the other two criteria elements (severe underachievement and information processing condition).

Step 4: The team must verify this discrepancy through other measures such as observation, performance-based measures, etc.

Minnesota Regression Table

Correlation between Ability and Achievement Tests (r_{xy})

Ability Score	Correlation										
	.32	.37	.42	.47	.52	.57	.62	.67	.72	.77	.82
	Achievement Standard Scores										
75	67	66	66	65	65	64	64	64	64	64	64
76	67	67	67	66	66	65	65	65	64	65	65
77	68	67	67	66	66	65	65	65	65	66	66
78	68	67	67	66	66	66	66	66	66	66	66
79	68	68	67	67	67	66	66	66	67	67	68
80	69	69	68	68	67	67	67	67	67	68	69
81	69	69	68	68	68	68	68	68	68	69	69
82	69	69	69	68	68	68	68	68	69	69	70
83	70	69	69	69	69	69	69	69	70	70	71
84	70	70	69	69	69	69	69	70	70	71	72
85	70	70	70	70	70	70	70	70	71	72	73
86	71	70	70	70	70	70	71	71	72	72	73
87	71	70	71	71	71	71	71	72	72	73	74
88	71	70	71	71	71	72	72	72	73	74	75
89	72	72	72	72	72	72	73	73	74	75	76
90	72	72	72	72	72	73	73	74	75	76	77
91	72	72	72	73	73	73	74	74	75	76	78
92	73	73	73	73	73	74	74	75	76	77	78
93	73	73	73	74	74	74	75	76	77	78	89
94	73	73	74	74	74	75	76	76	77	79	80
95	74	74	74	74	75	76	76	77	78	79	81
96	74	74	74	75	75	76	77	78	79	80	82
97	74	75	75	75	76	77	78	79	80	81	83
98	74	75	75	76	77	77	78	79	80	82	83
99	75	75	76	76	77	78	79	80	81	82	84
100	75	76	76	77	78	78	79	81	82	83	85
101	75	76	77	77	78	79	80	81	83	84	86
102	76	76	77	78	79	80	81	82	83	85	87
103	76	77	77	78	79	80	81	83	84	86	87
104	76	77	78	79	80	81	82	83	85	86	88
105	77	77	78	79	80	81	83	84	85	87	89
106	77	78	79	80	81	82	83	85	86	88	90
107	77	78	79	80	81	82	84	85	87	89	91
108	78	79	80	81	82	83	84	86	88	89	92
109	78	79	80	81	82	84	85	87	88	90	92
110	78	79	80	82	83	84	86	87	89	91	93
111	79	80	81	82	83	85	86	88	90	92	94
112	79	80	81	82	83	85	86	88	90	92	94
113	79	80	82	83	84	86	87	89	91	93	96
114	80	81	82	83	85	86	88	90	92	94	96
115	80	81	82	84	85	87	89	91	93	95	97
116	80	82	83	84	86	88	89	91	93	96	98
117	81	82	83	85	86	88	90	92	94	96	99
118	81	82	84	85	87	89	91	93	95	97	100

Ability Score	Correlation										
	.32	.37	.42	.47	.52	.57	.62	.67	.72	.77	.82
	Achievement Standard Scores										
119	81	83	84	86	87	89	91	93	95	98	101
120	82	83	85	86	88	90	92	94	96	99	101
121	82	83	85	87	88	90	92	95	97	99	102
122	82	84	85	87	89	91	93	95	98	100	103
123	82	84	86	88	90	92	94	96	98	101	104
124	83	84	86	88	90	92	94	97	99	102	105
125	83	85	87	89	91	93	95	97	100	103	105
126	83	85	87	89	91	93	96	98	101	103	106
127	84	86	88	90	92	94	96	99	101	104	107
128	84	86	88	90	92	94	97	99	102	105	108
129	84	86	88	90	93	95	97	100	103	106	109
130	85	87	89	91	93	96	98	101	103	106	110
131	85	87	89	91	94	96	99	101	104	107	110
132	85	87	90	92	94	97	99	102	105	108	111
133	86	88	90	92	95	97	100	103	106	109	112
134	86	88	90	93	95	98	100	103	106	109	113
135	86	89	91	93	96	98	101	104	107	110	114
136	87	89	91	94	96	99	102	105	108	111	114
137	87	89	92	94	97	100	102	105	108	112	115
138	87	90	92	95	97	100	103	106	109	113	116
139	88	90	93	95	98	101	104	107	110	113	117
140	88	90	93	96	98	101	104	107	111	114	118
141	88	91	93	96	99	102	105	108	111	115	119
142	89	91	94	97	99	102	105	109	112	116	119
143	89	92	94	97	100	103	106	109	113	116	120
144	89	92	95	98	100	104	107	110	113	117	121
145	90	92	95	98	101	104	107	111	114	118	122
146	90	93	95	98	101	105	108	111	115	119	123
147	90	93	96	99	102	105	109	112	116	119	124
148	90	93	96	99	103	106	109	113	116	120	124
149	91	94	97	100	103	106	110	113	117	121	125
150	91	94	97	100	104	107	110	114	118	122	126
151	91	94	98	101	104	108	111	115	119	123	127
152	92	95	98	101	105	108	112	115	119	123	128
153	92	95	98	102	105	109	112	116	120	124	128
154	92	96	99	102	106	109	113	117	121	125	129
155	93	96	99	103	106	110	114	117	121	126	130
156	93	96	100	103	107	110	114	119	122	126	131
157	93	97	100	104	107	111	115	119	123	127	132
158	94	97	101	104	108	111	115	119	124	128	133
159	94	97	101	105	108	112	116	120	124	129	133
160	94	98	101	105	109	113	117	121	125	129	134

Note: Both the ability and achievement scores are based on a mean standard score of 100 with a standard deviation of ±15. In constructing this table, standard scores were rounded to the nearest whole number.

Information Processing (Part C)

The third component of the specific learning disabilities (SLD) criteria requires teams to identify an information processing condition. Teams may determine a student's information processing condition based on observations, interviews, and other data collection procedures. It is important to determine a student's information processing strengths as well as areas of difficulty and use that information to assist in developing a program of specially designed instruction.

The basis for this section is the identification of an information processing condition is integral to SLD eligibility determination and that information processing deficits are assessable and observable. Identifying strategies to address information processing conditions occurs throughout the process of Individual Education Program (IEP) development.

> To some extent, the term *information processing* is synonymous with cognition, referring generally to mental capacities that give rise to knowledge. Information processing, however, is a more specific concept. The term has been borrowed from communications theory and highlights the temporal and spatial limits that characterize the human mind. Perhaps even more helpful in defining information processing, however, is the supposition that information is operated on by various mental structures or processes whose functions are to *select, store, transform, integrate, and amplify* that stimulation. Both external stimulation and stored mental representations are the 'contents' upon which the system operates. Information processing models attempt to explain behavior by describing and referring to the mental structures and processes that influence the way environmental events are *sensed, modified, and stored* to guide human behavior (Daehler, M. W., & Bukato, D. 1985).
>
> Cognitive psychologists within the information processing paradigm have a particular way of deciding which subsystems comprise higher mental processes, some insights and intuitions about what they are like, and some commitments regarding how they should be studied. They have defined the area of study as the way man *collects, stores, modifies, and interprets* environmental information or information already stored internally. They are interested in knowing how he adds information to his permanent knowledge of the world, how he *accesses* it again, and how he *uses* his knowledge in every facet of human activity (Lachman, R. T., Lachman, J. L. & Butterfield, E. C. 1979).

In order to provide common language for the definition and components of information processing, these two definitions from theorists in the field of cognitive psychology were used to develop a Minnesota definition. The resulting definition states that information processing is the act of *receiving, recalling, and using* information to function in an environment. "The concept of information processing is the only construct consistently present in definitions of learning disabilities throughout the history of the field (Kavale, 1988)."

Minnesota rule states that an information processing problem interferes with learning so that the student does not learn at an adequate rate when provided with the usual developmental opportunities and instruction in the regular learning environment. Information processing conditions must be observable and noticeable in a variety of settings and are identified with the input, integration, or output stages seen in Diagram 1 on page 6-4.

Information Processing Model *(Refer to Diagram 1, page 6-4)*

In the field of cognitive psychology, information processing is considered a function of cognition or thinking. The smallest circle on the diagram represents a student's internal processing of information. Inside this circle three conceptual divisions or stages are made in the sequence of processing information. These stages are fairly easy to understand if a mental analogy is made to a model of computer functioning.

The stages of information processing are represented in boxes labeled *Input* (intake through senses), *Integration* (attachment of new information to existing concepts) and *Output* (communication of information). The sequence of information processing occurs internally and is affected by a student's interactions and experiences in school, home, and community represented by the circles surrounding the student. The internal feedback loop illustrates the constant flow and use of information. Input, integration, and output are imbedded in environment of home, school, and community. The student is at the center of this dynamic system.

Input and Output

Sensory "Input" is received through visual, auditory, tactile, kinesthetic, gustatory, and olfactory senses. "Output" is expressed through spoken, written, gestural, or motoric modalities. Minnesota rule identifies one of its six information processing components under input *(acquisition)* and one component under output *(expression)*.

Integration (Executive Functions)

Integration or executive functions refer to "higher order cognitive strategies" that assist students in organizing information. Four such cognitive strategies referred to frequently in the literature are: chunking—grouping items so that each one brings to mind a complete series of items; clustering—organizing items in categories; mnemonics—using idiosyncratic methods for organizing materials; and coding—varying the form of the information (Swanson, 1988). Minnesota rule lists four of six information processing components as integration functions: *storage, organization, retrieval, and manipulation.*

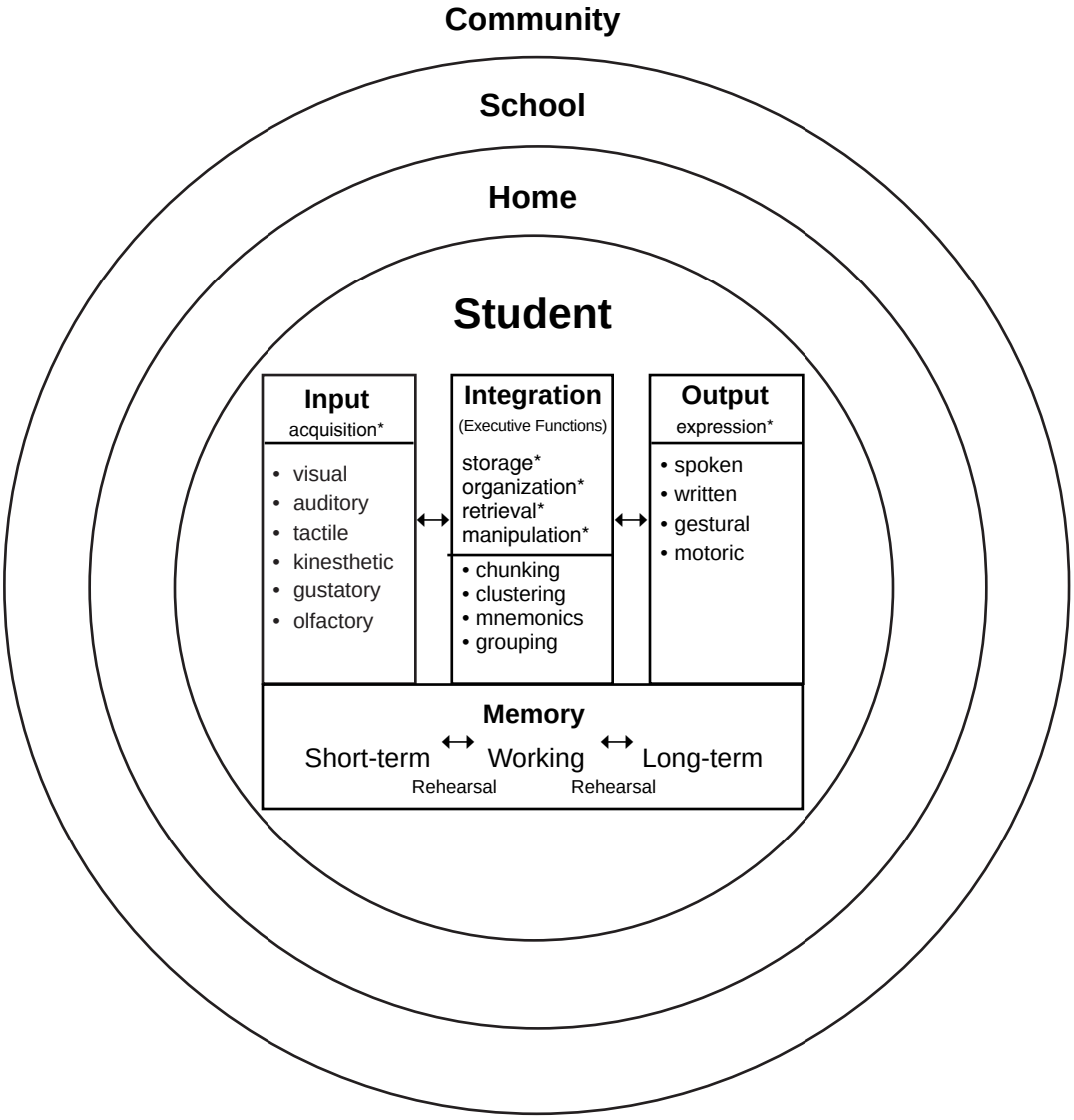
Memory

Memory is identified as the cognitive structure underlying the processing of all information, shown by the box labeled "Memory." Memory is composed of short-term, working, and long-term memory and the activity of rehearsal. Short-term memory is the result of the senses perceiving information and determining whether or not the information is important (Wolfe, 1996). Important information is stored in short-term memory. In order to use information in short-term memory, it must be rehearsed. Working memory is the use of linkages, associations, and general organizational strategies to store information for a relatively short time. In order to transfer information to long-term memory, it must be rehearsed. Long-term memory is the permanent storage of information and is virtually unlimited in terms of capacity. Rehearsal, the conscious repetition of information to recall at a later time, is the key in transferring information from short-term memory to working memory to long-term memory.

The input, integration, and output stages of this model may overlap, but it is assumed that there is an ordered sequence in the processing of information. That is to say, input precedes working with information in the integration phase, which precedes the communication or output phase. Students with learning disabilities are identified as having an information processing condition in one or more of the six information processing components found in italics on Diagram 1.

Diagram 1

Information Processing Model



** Components of Information Processing in Minnesota Rule*

IP Components

In developing a common understanding of information processing, it is necessary to recognize the varied experiences of Minnesota practitioners. As a result, information processing components and their definitions are presented in multiple formats designed to be informative, comprehensive, and related to different teacher training backgrounds. Lists of observable attributes are presented for each component, and examples are presented in each modality to explain further the components of information processing.

Minnesota rule states that "a specific learning disability is manifested by an interference with the **acquisition, organization, storage, retrieval, manipulation or expression of information** ... ." These six components of information processing may be rearranged to form the mnemonic SOAR'EM. Committing SOAR'EM to memory will help the assessor remember the areas of information processing. These components are defined as follows:

S	**Storage**	*adding information to existing information*
O	**Organization**	*structuring information, categorizing, sequencing, etc.*
A	**Acquisition**	*accurately gaining, receiving and/or perceiving information*
R	**Retrieval**	*locating or recalling stored information*
E	**Expression**	*communicating information*
M	**Manipulation**	*applying, using, or altering information*

Two charts follow, "Attributes of Components" and "Examples of Components," that are designed to assist the practitioner in linking the SOAR'EM components to observable classroom behaviors.

Attributes of Components

The following chart, while not an exhaustive listing of the attributes of the SOAR'EM components, may prove useful to the team in observing and identifying information processing problems.

Storage

Adding information to existing information

long-term memory	short-term memory	memory tracing	rehearsing
mnemonics	relating	chunking	clustering
coding	other		

Organization

Structuring information, categorizing, sequencing, etc.

differentiating	clustering	mapping	webbing
ordering	time managing	labeling	prioritizing
sequencing	planning	following directions	arranging
categorizing	associating	other	

Acquisition

Accurately gaining, receiving, and/or perceiving information

perceiving	receiving	absorbing	encoding
developing	comprehending	linking	gaining
other			

Retrieval

Locating or recalling stored information

remembering	recalling	selecting	self-talking
accessing	working memory	recognizing	formulating
associating	cueing	scanning	searching
locating	imagining	processing speed	other

Expression

Communicating information

reconstructing	reciting	sharing	pointing
reading	tracing	naming	stating
handwriting	illustrating	using	creating
acting	showing	demonstrating	drawing
copying	speaking	gesturing	typing
motor planning	testing	other	

Manipulation

Applying, using or altering information

imagining	appraising	assessing	critiquing
judging	grading/rating	generalizing	formulating
reasoning	transforming	proposing	interpreting
summarizing	separating	inferring	planning
integrating	calculating	translating	synthesizing
problem-solving	tabulating	grouping	analyzing
preparing	applying	strategizing	altering
paraphrasing	evaluating	other	

Examples of Components

Another way of conceptualizing information processing conditions might be through modalities of learning (tactile, kinesthetic, auditory, visual, etc.). The following examples are arranged by information processing component with modalities (input and output) listed in parentheses.

Storage

Difficulty with:

- Memorizing Braille (tactile)
- Remembering physical movement (kinesthetic)
- Memorizing songs or pitches (auditory)
- Memorizing visual images (visual)
- Remembering how to write letter shapes (written)
- Memorizing and reciting a poem (spoken)
- Remembering a movement or a series of movements (motoric)
- Doing finger plays (gestural)

Organization

Difficulty with:

- Sorting by texture (tactile)
- Finding the location of body parts (kinesthetic)
- Following auditory sequences (auditory)
- Matching socks (visual)
- Sequencing a written story (written)
- Sequencing an oral story (spoken)
- Putting on winter gear (motoric)
- Playing charades (gestural)

Acquisition

Difficulty with:

- Sensing temperature (tactile)
- Predicting consequences of physical actions (kinesthetic)
- Hearing sounds accurately (auditory)
- Perceiving words accurately (visual)
- Forming the letters b, d, p, and q (written)
- Pronouncing words accurately (spoken)
- Skipping (motoric)
- Playing peekaboo (gestural)

Retrieval

Difficulty with:

- Remembering the texture of an object (tactile)
- Imaging steps in batting a ball (kinesthetic)
- Recognizing a song (auditory)
- Recalling a word while reading (visual)
- Locating and crossing out items on a list (written)
- Saying a song lyric (spoken)
- Performing a scene in a play (motoric)
- Giving hand signals (gestural)

Expression

Difficulty with:

- Tracing a shape with a finger (tactile)
- Typing (kinesthetic)
- Making sound/symbol association (auditory)
- Drawing (visual)
- Reciting a poem (spoken)
- Using good penmanship (written)
- Batting a ball (motor)
- Demonstrating in show and tell (gestural)

Manipulation

Difficulty with:

- Playing rock, paper, scissors (tactile)
- Putting the steps of a soccer move into action (kinesthetic)
- Transforming a melody to a harmony (auditory)
- Setting up a science experiment (visual)
- Summarizing a speech (spoken)
- Grouping similar terms in algebra (written)
- Developing an original gymnastics move (motoric)
- Expressing emotions through hand movement (gestural)

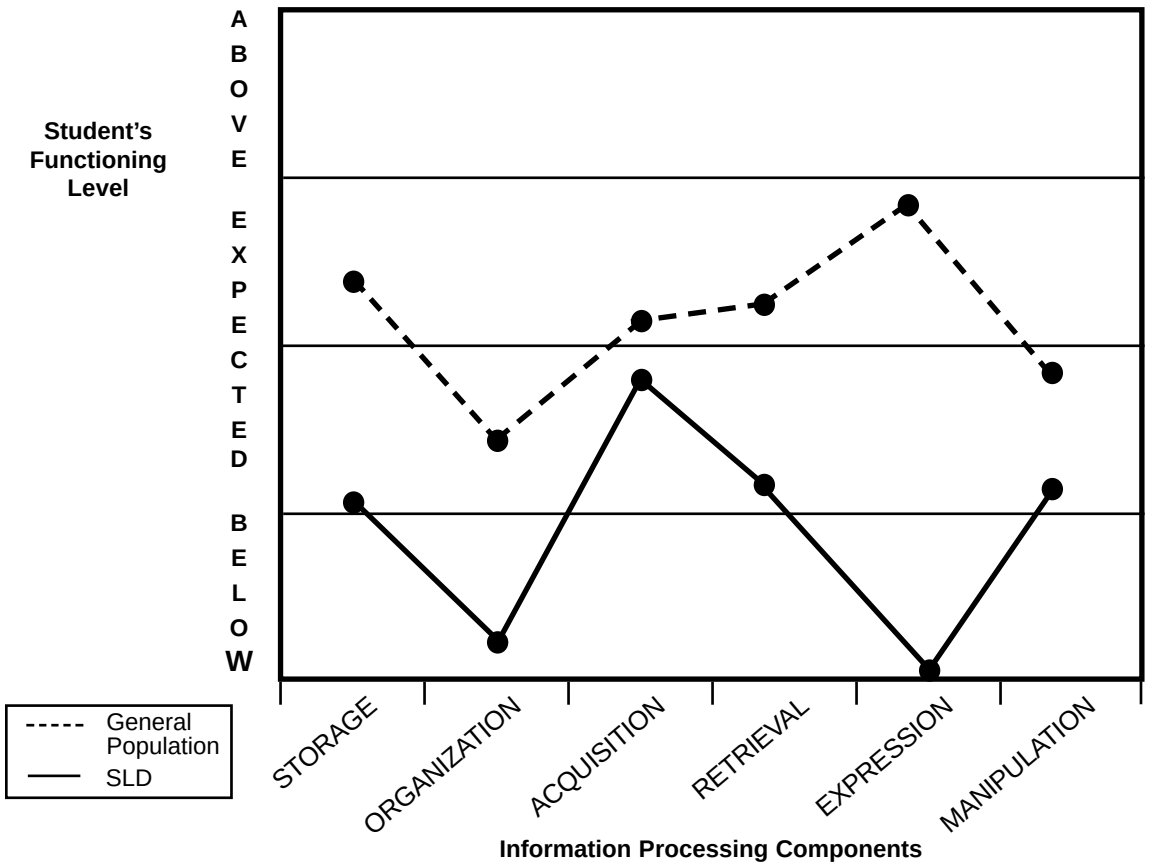
IP Lifelong Impact

Most students have information processing strengths and weaknesses; however, students with SLD have information processing areas of concern that are substantially below average or outside the expected range for peers of the same age. Students with SLD have noticeably different abilities to store, organize, acquire, retrieve, express, and manipulate information.

Average or "expected" functioning in any component occurs over a range of competency within which most students fall at any given age. One can think of this conceptually as the area between -1 and +1 standard deviations from an average score. Understanding what is "typical," "expected," or "average" functioning in the components of information processing is key to identifying an information processing condition.

Information processing conditions in students with SLD are severe, and they provide a basis for understanding a students' learning problems as well as for providing appropriate accommodations and specially designed instruction.

Sample Information Processing Profile



The following story is presented to illustrate the potential lifelong impact of an information processing condition.

The Story of Jane

Jane has difficulty **retrieving** information (locating or recalling stored information). She demonstrates this problem by having trouble **remembering** basic math facts, science facts for a test, teacher's oral directions, where she put her house keys, and how to count change. Jane is embarrassed by her problems.

In school, Jane's math grade is a "D". Jane's retrieval problem affects many areas of her functioning including her emotional well-being.

Later on in high school, Jane's problem of remembering basic math facts results in her decision to take only two high school math classes even though Jane's transition plan career choice is architecture, which requires many years of college.

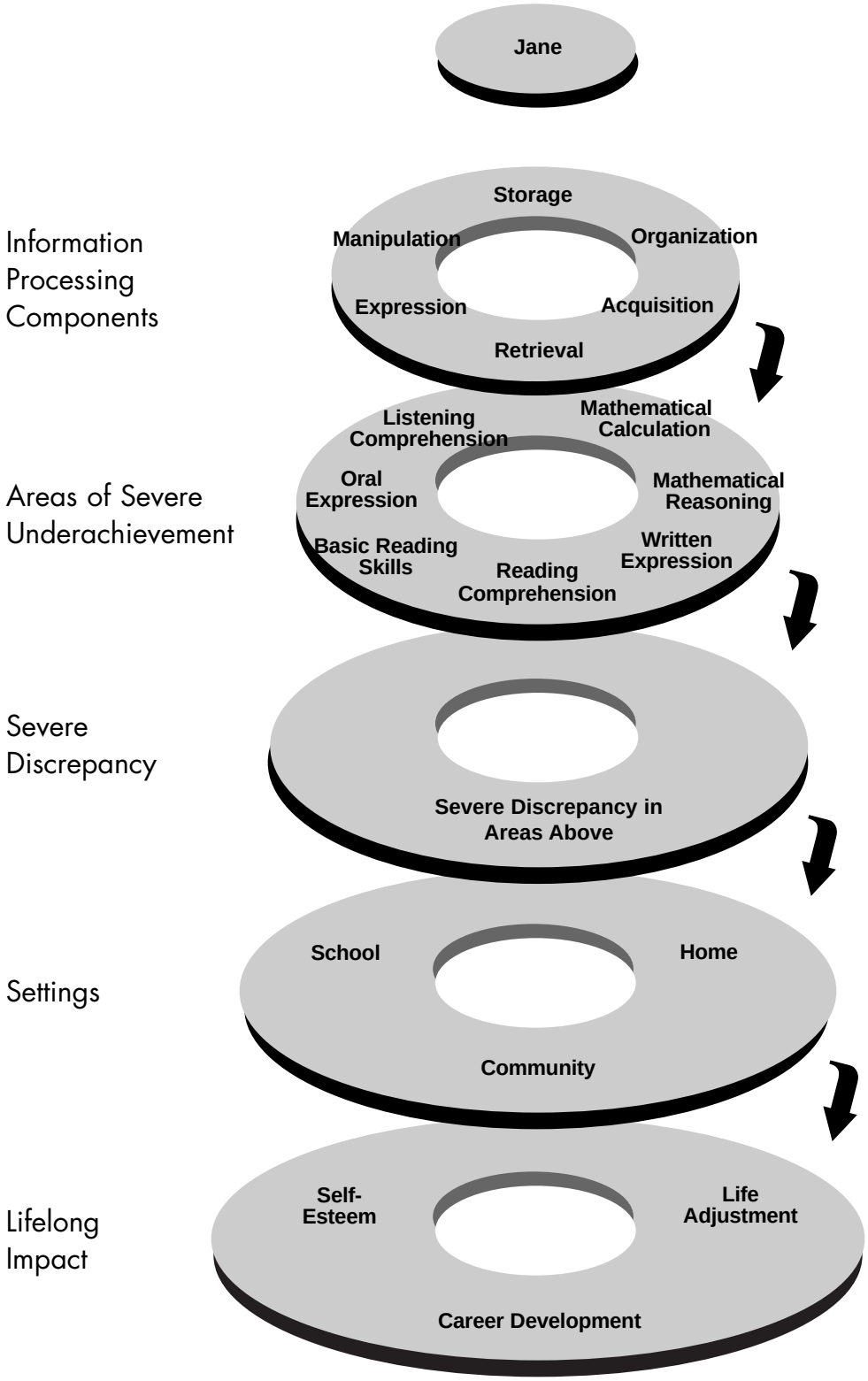
The university Jane wishes to attend requires more than two years of high school math; therefore, Jane is not admitted to the university of her choice and experiences depression.

Jane enrolls in a community college and begins taking classes. She gives up her dream of becoming an architect and pursues certification as an architectural CAD technician.

Jane's change in career preparation now impacts the income Jane is likely to earn as well as her self-esteem and life experiences.

Lifelong Effects of Jane's Information Processing Condition

IP Lifelong Impact



Assessment of Information Processing

The assessment of information processing begins with the standard assessment process (see Section 3: Assessment Process). Information processing may be thought of as a "professional judgment" piece of the SLD criteria and may be assessed through systematic observation in a variety of settings.

In this section, emphasis is placed on a pragmatic method of assessing information processing. Each assessor, through careful observation, should be able to describe the student's approach, persistence, attitude, learning style, and preferences exhibited when attempting to process information. These behaviors are observable and measurable and should be documented as part of a complete assessment. It is also important to observe and document a student's use or lack of use of learning strategies such as mnemonics, rehearsal, chunking, etc.

Data collection forms along with methods to interpret and analyze student work are presented at the end of this section. Some of the forms already presented also include sections on Information Processing. For example, the Home and Family Interview (see Section 4: Severe Underachievement) includes items for parent input in severe underachievement, severe discrepancy, and exclusionary factors as well as items on information processing strengths and areas of concern.

Note that an information processing condition must appear across a variety of settings, such as home, school, and community. Emphasis is placed on assessing and understanding the student in a variety of environments because specific learning disabilities affect many aspects of a student's real life functioning.

The sample forms may be used in a way that fits the individual team's assessment process. The forms are not mandatory, but documenting assessment data on information processing is required. Black line masters of all forms can be found in a separate section of this manual. Note that information processing items in each form are coded to the areas of SOAR'EM.

On the following pages are suggested forms including Review of Existing Data Questions for IP, Analysis of Student Performance, IP Teacher and IP Student Interviews, IP Standardized Test Grid, IP Assessment Interpretation, IP Data Summary Sheet, and IP Tally Sheet. Other informal assessment methods and techniques may also be used in assessing information processing.

Review of Existing Data Questions for IP

Student's Name _____ Grade _____ Birth Date _____

General Education Teacher _____ Date _____

Assessor _____

Pose these questions to the team at the review of existing data meeting. Note the length of time the student has had the problem(s) and the situation in which the problem(s) are reported.

1. How does the student learn? (copying, rehearsing, using fingers, auditory and visual rehearsing, etc.)

2. Is the student's method of learning identified in question #1 used in all subject areas?

3. At what point does the student's method of learning lose its effectiveness?

4. Describe the student's organizational skills.

5. What behavior does the student demonstrate when attempting to recall information?

6. What is the student's response to corrective feedback?

7. How well does the student take tests?

8. Does the student's body language match his or her verbal expression?

9. Does the student express him or herself fluently?

Probing Questions

Open-ended questions may be used in student interviews to gather information about suspected information processing conditions and to determine the method a student uses to remember information.

The questions on this page are examples of open-ended questions for gathering data about a student's information processing methods. The questions, along with sample student answers, are keyed to the components of information processing (SOAR'EM).

Sample Questions

Directions: Ask questions designed to elicit information about how the student learns. Based on the student's response, probe further to gather in-depth information about a student's information processing strategies and strengths.

1. Here is a new word to read, write, or spell. The word is (teacher selects word) Present word, ask: What is the word and how did you remember it? (SOAR'EM)

   The student will describe the method used to remember. May be used to test long-term memory by repeating the procedure and using the same word later in the interview.

2. Show the student a word already known: What is the word? How do you remember it? (E,M)

   The student will describe the method he or she uses to remember.

3. What can you remember about your classroom? Tell me everything you can remember. (S,R,O,E)

   The student will reveal information about the type of sensory information to which he or she attends. The student may be probed for further information.

4. How do you remember what your parent or teacher tells you to do? (S,O,E,M)

   The answer tells you how the student processes auditory information.

5. What did you have for dinner or supper last night? (R)

   The answer requires a combination of visualization, memory, and expression. Probe with further questions if necessary.

The assessor may develop a set of questions for his or her own use and combine demonstration teaching with informal questioning techniques.

Analysis of Student Performance

It is as important to identify an information processing condition as it is to identify a severe discrepancy and/or severe underachievement when assessing a student for a suspected learning disability. The analysis of student work is an often overlooked source of information. The link between an information processing condition, severe discrepancy in one of the seven areas of eligibility, and severe underachievement can be partially made through this analysis.

Samples of the student's work across time, anecdotal information, documentation of observations, and interviews are useful in establishing this deficit. Analysis of this information may also identify a student's processing strengths, which can then be maximized to help develop student coping strategies and teaching strategies.

Using the Charts *(Charts follow on the next six pages)*

- Each information processing component and representative attributes are noted at the top of each page.
- The seven areas of achievement are listed down the left hand side of each chart in the first column.
- The middle column lists some example difficulties a student might experience in each of the seven areas of achievement.
- The third column indicates possible sources of information.
- A team member may add any other pertinent information to this chart that is specific to the building or grade level.

Using samples of a student's work, highlight the examples of possible information processing problems, i.e., misspellings, issues of spacing and capitalization errors, alignment issues, omissions, and problems in remembering basic facts. Use this highlighted information and the charts to identify the area of information processing represented by these problems.

Chart 1 ***Analysis of Student Performance***

Storage

Memory, Rehearsing, Relating

Directions: Please circle the area of student difficulty and the source of information based on your analysis of the student's work.

Area of achievement	Student has difficulty with	Sources of information
Basic Reading Skills	Repeating letters/sounds/words Recalling letters/sounds/words	Sound/symbol sheets Guided samples
Reading Comprehension	Reciting facts Identifying significant details Recognizing logical relationships	Worksheets Homework Quizzes
Mathematical Calculation	Recalling numeration skills	Math papers and quizzes
Mathematical Reasoning	Remembering temporal/spatial sequences Remembering mathematical relationships Repeating terminology	Quizzes and math papers
Written Expression	Remembering motor patterns Maintaining vocabulary Remembering grammar rules	Journal writing Compositions Reports
Oral Expression	Imitating sounds and words Remembering words	Rhyming games
Listening Comprehension	Remembering facts and details given orally Recalling meanings of terms spoken	Class discussions

Chart 2

Analysis of Student Performance

Organization

Arrange, Plan, Label

Directions: Please circle the area of student difficulty and the source of information based on your analysis of the student's work.

Area of achievement	Student has difficulty with	Sources of information
Basic Reading Skills	Differentiating between letters/words Labeling and associating sounds with letters/words Sequencing letters/words Reading from left to right	Worksheets Picture cards Listening to oral reading
Reading Comprehension	Finding main topics from facts Organizing facts sequentially, chronologically	Worksheets Notes, mapping, timelines
Mathematical Calculation	Applying concepts of conservation, classification, place values, regrouping Completing problems systematically	Worksheets Applied problems
Mathematical Reasoning	Prioritizing problem-solving steps Sequencing numbers Associating coins with money value Demonstrating sense of time	Worksheets Counting change Board work
Written Expression	Spacing problems on page Writing from left to right Writing letters in correct order to make words Writing words into meaningful sentences Supporting main idea in a paragraph Sequencing paragraphs Taking meaningful notes	Math papers Notes Journal Daily oral language samples Compositions
Oral Expression	Retrieving needed words Sequencing meaningful sentences	Observations Class discussions
Listening Comprehension	Discriminating between likenesses and differences Integrating current information with past experience Following oral directions Associating meaning with spoken words Taking meaningful notes from lecture presentations	Worksheets presented orally Spelling bees Observations

Chart 3

Analysis of Student Performance

Acquisition

Receive, Link, Gain, Comprehend

Directions: Please circle the area of student difficulty and the source of information based on your analysis of the student's work.

Area of achievement	Student has difficulty with	Sources of information
Basic Reading Skills	Focusing on print Tracking as reading Learning the alphabet Discriminating between sounds, letters, words Developing vocabulary	Observe reading fluency Alphabet song Rhyming games Vocabulary cards
Reading Comprehension	Absorbing information from reading Perceiving literal meaning Identifying significant details	Class questions and answers Worksheets Guided reading practice
Mathematical Calculation	Recognizing numeration skills (counting, adding, subtracting, multiplying, etc.) Reading numerals/symbols	Worksheets Oral math work Math games
Mathematical Reasoning	Perceiving temporal/spatial sequences Reasoning Judging	Tells time Problem worksheets Oral responses in class
Written Expression	Tracing and copying forms from paper, text, board, etc.	Worksheets Board work Notes
Oral Expression	Talking	Speeches Show and tell
Listening Comprehension	Paying attention Discriminating likenesses and differences in oral language Adequately understanding language	Answers questions appropriately Observations

Chart 4

Analysis of Student Performance

Retrieval

Locate, Recognize, Search

Directions: Please circle the area of student difficulty and the source of information based on your analysis of the student's work.

Area of achievement	Student has difficulty with	Sources of information
Basic Reading Skills	Labeling letters Recognizing whole words Decoding words in isolation/ text with fluency rate Skimming	Oral reading Word searches
Reading Comprehension	Identifying significant details Locating	Cloze activity Fill in the blanks Chapter questions
Mathematical Calculation	Labeling numbers, signs Applying computational skills	Tests basic math facts Assurance of mastery
Mathematical Reasoning	Formulating hypotheses Recognizing when to add, subtract, multiply, divide	Story problems Reciting order of operations
Written Expression	Reproducing correct letter forms Spelling whole words automatically Using correct capitalization, punctuation Automatically producing forms	Spelling tests Writing samples Spontaneous writing Daily oral language
Oral Expression	Processing words as needed Self-talking	Observations
Listening Comprehension	Remembering what was heard Associating what was heard with previously stored information Accessing desired information Associating sounds with letters	Answering questions Retelling stories Paraphrasing Summary

Chart 5

Analysis of Student Performance

Expression

Reconstruct, Demonstrate, Share

Directions: Please circle the area of student difficulty and the source of information based on your analysis of the student's work.

Area of achievement	Student has difficulty with	Sources of information
Basic Reading Skills	Reciting letter names and sounds Decoding words and sentences	Oral reading Timed readings
Reading Comprehension	Identifying significant details, main ideas Restating information Reading with fluency	Mapping/Outlining Work completion
Mathematical Calculation	Writing numerals, symbols with appropriate concept/process	Worksheets
Mathematical Reasoning	Measuring distance, weights, area, volume Telling time, temperature Counting money	Observations, math games Life skills Lunch money Employer reports
Written Expression	Producing different formats Documenting information	Letter writing Compositions Reports
Oral Expression	Speaking with oral fluency Pronouncing words correctly Ordering words into sentences Stating ideas Responding Asking questions	Class presentations Restating questions Class participation
Listening Comprehension	Following directions	Observations Work completion

Chart 6

Analysis of Student Performance

Manipulation

Evaluate, Integrate, Translate

Directions: Please circle the area of student difficulty and the source of information based on your analysis of the student's work.

Area of achievement	Student has difficulty with	Sources of information
Basic Reading Skills	Associating sounds with written symbols Blending sounds into meaningful units Applying dictionary skills	Reading flash cards Alphabetizing Worksheets
Reading Comprehension	Analyzing sentences, paragraphs, stories Synthesizing related material Inferring meaning Paraphrasing information read Interpreting notes taken from lecture presentation	Class discussions Analysis of plot, character, etc. Reading strategies
Mathematical Calculation	Using computer, calculator Matching, sorting, classifying Associating numeral/symbol with concept/process Calculating	Assignments Computer games
Mathematical Reasoning	Solving word problems Applying concepts, e.g. before and after, right and left, up and down Formulating problem solving options	Check writing and ledgers Assignments, reports Science fair projects Simulation
Written Expression	Changing word forms Writing meaningful sentences Using information in various forms Choosing accurate descriptive language	Worksheets Compositions Reports, stories, essays, poetry, notes, outlines, letters, job applications
Oral Expression	Grouping words into sentences Arranging meaningful sentences Participating in discussions	Observations Demonstrations Speeches
Listening Comprehension	Integrating current auditory information with past experience Associating meaning with spoken word	Paraphrasing Vocabulary drills Story completion Interpreting meaning

IP Teacher Interview

Student's Name _____ Grade _____ Birth Date _____

General Education Teacher _____ Date _____

Assessor _____

Directions: Please rate the student on the following behaviors that might indicate the presence of an information processing condition. Each section represents one component of information processing. Additional information may be recorded on a separate sheet of paper or on the back of this form.

Storage	Almost Always	Frequently	About 1/2 the time	Seldom	Hardly ever	Not observed
Follows two- to three-step directions	❑	❑	❑	❑	❑	❑
Immediately recalls information	❑	❑	❑	❑	❑	❑
Retains sequences	❑	❑	❑	❑	❑	❑
Grasps simple word meanings	❑	❑	❑	❑	❑	❑
Recognizes or recalls information over time	❑	❑	❑	❑	❑	❑

Organization	Almost Always	Frequently	About 1/2 the time	Seldom	Hardly ever	Not observed
Hands in assignments on time	❑	❑	❑	❑	❑	❑
Has an organized locker or desk	❑	❑	❑	❑	❑	❑
Completes assignments	❑	❑	❑	❑	❑	❑
Uses planning skills	❑	❑	❑	❑	❑	❑
Aligns work spatially	❑	❑	❑	❑	❑	❑
Sequences information	❑	❑	❑	❑	❑	❑

Acquisition	Almost Always	Frequently	About 1/2 the time	Seldom	Hardly ever	Not observed
Links new information to that previously learned	❑	❑	❑	❑	❑	❑
Obtains information by hearing	❑	❑	❑	❑	❑	❑
Obtains information by seeing	❑	❑	❑	❑	❑	❑
Obtains information by reading	❑	❑	❑	❑	❑	❑
Obtains information by touching	❑	❑	❑	❑	❑	❑
Obtains information thru multi-sensory approach	❑	❑	❑	❑	❑	❑
Can discriminate visually	❑	❑	❑	❑	❑	❑
Can discriminate auditorily	❑	❑	❑	❑	❑	❑

Retrieval	Almost Always	Frequently	About 1/2 the time	Seldom	Hardly ever	Not observed
Responds in acceptable amount of time	❑	❑	❑	❑	❑	❑
Develops strategies to help recall information	❑	❑	❑	❑	❑	❑
Can name and label	❑	❑	❑	❑	❑	❑
Recalls sounds associated with letters and words	❑	❑	❑	❑	❑	❑
Counts and calculates automatically	❑	❑	❑	❑	❑	❑
Recalls sequential steps for tasks	❑	❑	❑	❑	❑	❑

Expression	Almost Always	Frequently	About 1/2 the time	Seldom	Hardly ever	Not observed
Demonstrates oral fluency	❑	❑	❑	❑	❑	❑
Demonstrates reading fluency	❑	❑	❑	❑	❑	❑
Demonstrates writing fluency	❑	❑	❑	❑	❑	❑
Responds appropriately to nonverbal communication	❑	❑	❑	❑	❑	❑
Asks questions/gives answers related to content	❑	❑	❑	❑	❑	❑
Participates in class activities	❑	❑	❑	❑	❑	❑

Manipulation	Almost Always	Frequently	About 1/2 the time	Seldom	Hardly ever	Not observed
Applies learned information to new situations	❑	❑	❑	❑	❑	❑
Infers information	❑	❑	❑	❑	❑	❑
Summarizes information	❑	❑	❑	❑	❑	❑
Interprets information	❑	❑	❑	❑	❑	❑
Writes sentences of varying length and complexity	❑	❑	❑	❑	❑	❑
Analyzes and solves problems of varying complexity	❑	❑	❑	❑	❑	❑
Interprets social cues	❑	❑	❑	❑	❑	❑
Differentiates details from key concepts	❑	❑	❑	❑	❑	❑

IP Student Interview

Student's Name _____ Grade ____ Birth Date _____

General Education Teacher _____ Date _____

Assessor _____

Directions: Which word best describes you? (Read items to student and modify as needed.)

1. After hearing new information, I learn it by saying it again to myself. (S)	Usually	Sometimes	Seldom
2. I spell words by seeing the word in my mind. (S)	Usually	Sometimes	Seldom
3. I spell words by sounding out the letters. (S)	Usually	Sometimes	Seldom
4. I turn my assignments in on time. (O)	Usually	Sometimes	Seldom
5. My locker and desk are in order. (O)	Usually	Sometimes	Seldom
6. I run out of space when I am writing. (O)	Usually	Sometimes	Seldom
7. When I write papers, I get information before I begin writing. (O)	Usually	Sometimes	Seldom
8. I make notes or an outline before I write. (O)	Usually	Sometimes	Seldom
9. I edit or change my writing at least once before handing my paper in to the teacher. (O)	Usually	Sometimes	Seldom
10. When I do a math story problem, I think about the information before I do the work. (O)	Usually	Sometimes	Seldom
11. I can tell a story in the right order. (O)	Usually	Sometimes	Seldom
12. I know how to study for a test. (O)	Usually	Sometimes	Seldom
13. I remember things without having to have them repeated. (A)	Usually	Sometimes	Seldom
14. I learn new things easily. (A)	Usually	Sometimes	Seldom
15. I understand what I read. (A)	Usually	Sometimes	Seldom
16. I understand what someone tells me. (A)	Usually	Sometimes	Seldom
17. I understand my class work. (A)	Usually	Sometimes	Seldom

18. I know my basic addition facts. (R)	Usually	Sometimes	Seldom
19. I know my basic multiplication facts. (R)	Usually	Sometimes	Seldom
20. I use pictures when I do a math problem. (R)	Usually	Sometimes	Seldom
21. I remember things from the past. (R)	Usually	Sometimes	Seldom
22. I remember the specific information I have studied for a test. (R)	Usually	Sometimes	Seldom
23. I like to play games that are timed. (R)	Usually	Sometimes	Seldom
24. I do things at a fast rate of speed. (R)	Usually	Sometimes	Seldom
25. I can tell you how to get around the building. (E)	Usually	Sometimes	Seldom
26. I like to: read aloud (E)	Usually	Sometimes	Seldom
draw (E)	Usually	Sometimes	Seldom
give oral reports (E)	Usually	Sometimes	Seldom
do an experiment (E)	Usually	Sometimes	Seldom
show how to do something (E)	Usually	Sometimes	Seldom
write (E)	Usually	Sometimes	Seldom
do math problems (M)	Usually	Sometimes	Seldom
27. I can find more than one way to answer a question. (M)	Usually	Sometimes	Seldom
28. I can explain what I learn to my parents. (M)	Usually	Sometimes	Seldom

Write your answers to these questions.

29. Name two things that are alike and tell why. (M,E) 1) _____ 2) _____

30. Name two things that are different and tell why. (M,E) 1) _____ 2) _____

31. How do you remember new information, such as spelling words, a friend's phone number, etc.? (S,O,E)

32. What are the names of all of your teachers including phy-ed, music and art? (S,O,E)

_____ _____ _____

_____ _____ _____

_____ _____ _____

S = Storage, 0 = Organization, A = Acquisition, R = Retrieval, E = Expression, M = Manipulation of information

IP Standardized Test Grid

Student's Name _____ Grade _____ Birth Date _____

General Education Teacher _____ Date _____

Assessor _____

Directions: This form may be used by an assessor to identify subtests in standardized tests that may indicate an information processing condition.

Caution: Minnesota rule requires that an information processing condition be verified in more than one setting. It is important to remember that many standardized tests are not designed for nor do they purport to measure information processing conditions. However, a trained examiner may be able to identify a suspected area of information processing difficulty or a trend in a student's subtest scoring patterns related to an information processing deficit.

	Test:	Test:	Test:	Test:
Storage				
Organization				
Acquisition				
Retrieval				
Expression				
Manipulation				

IP Eligibility

Teams must document information processing data and report it in the Assessment Summary Report (ASR). It is possible to tally or tabulate information processing data from the forms provided in the previous section and those found in Section 4: Severe Underachievement. In the pages that follow several forms for data collection are provided: the IP Assessment Interpretation, IP Data Summary Sheet, and IP Tally Sheet. When completed, one or more of these forms may help the team determine if an information processing condition exists. It is important to be mindful of collecting and documenting information processing data in a "variety of settings."

IP Assessment Interpretation

Student's Name _____ Grade ____ Birth Date _____

General Education Teacher _____ Date _____

Assessor _____

Directions: Record information gathered from the sources listed below and code by the appropriate SOAR'EM area. Example: The teacher interview is checked for "hardly ever" under hands in assignments and uses planning skills. Both would be written in the weaknesses column by the source box labeled Teacher Interview. Example: uses planning skills (0), hands in assignments (0)."O" stands for organization.

SOURCES	STRENGTHS	WEAKNESSES
Referral Form		
Review of Existing Data Questions		
Analyzing Student Work		
SLD Observation		
Teacher Interview		
Home and Family Interview		
Student Interview		
Standardized Testing Grid		

IP Data Summary Sheet

Student's Name _____ Grade ____ Birth Date _____

General Education Teacher _____ Date _____

Assessor _____

Directions: Record areas of difficulty identified through the assessment process; list sources for the information and settings in which the difficulty was observed.

Area	Problem	Setting	Source
Storage			
Organization			
Acquisition			
Retrieval			
Expression			
Manipulation			

EXAMPLES OF SETTINGS		EXAMPLES OF SOURCES	
School	**Home**	• Performance-based assessment measures	• Portfolio or authentic assessment
• Classroom	• Meal time	• Standardized tests (group or individual)	• District reporting system
• Lunchroom	• Play time	• Formal observation	• Outside agency evaluation
• Halls	• Chores	• Family members	• Student's self assessment
• Phy-ed	**Community**	• Documented interventions	
• Bus	• Employment	• Evaluation of daily work	
• One to one testing	• Recreational facilities	• Observation	
• Math class	• Church		
• Reading class	• Clubs		
• Office	• Bus		

IP Tally Sheet

Student's Name_____ Grade ____ Birth Date_____

General Education Teacher _____ Date _____

Assessor _____

The purpose of this tally sheet is to provide the number of items noted in each of the six components of information processing on the forms presented in Section 4: Severe Underachievement in this section.

Directions:

1. *Complete each of the items by filling in the top number of checked items for each form used. Note: There are optional areas for scoring additional SLD Observations and Teacher Interviews if more than one form is used. If necessary add information in the rows.*
2. *Add the top numbers for each of the columns and write the result in the total box.*
3. *Add the bottom numbers for each vertical column and subtract N/A responses from the bottom numbers. Write the result in the total box.*
4. *Once tallying is completed, the team can interpret the information along with other data sources related to information processing.*

Caution: There is no predetermined cutoff when using this chart.

Form	Storage	Organization	Acquisition	Retrieval	Expression	Manipulation
SLD Observation #1	/ 3	/ 4	/ 2	/ 3	/ 3	/ 3
Optional SLD Observation #2	/	/	/	/	/	/
Optional SLD Observation #3	/	/	/	/	/	/
Optional Teacher Interview #1	/ 5	/ 6	/ 8	/ 6	/ 6	/ 8
Optional Teacher Interview #2	/	/	/	/	/	/
Optional Teacher Interview #3	/	/	/	/	/	/
Optional Teacher Interview #4	/	/	/	/	/	/
Home and Family Interview	/2	/ 2	/ 4	/ 4	/ 2	/ 4
Student Interview	/ 5	/ 11	/ 5	/ 7	/ 10	/ 5
Other	/	/	/	/	/	/
Not Observed	/	/	/	/	/	/
TOTAL	/	/	/	/	/	/

Reducing Bias in SLD Assessment

Recent national and Minnesota demographic statistics demonstrate a pattern of continuing disproportionality of African American and American Indian students identified in the area of specific learning disabilities (SLD). Considerable attention was paid to this issue at the federal level during the hearings for the reauthorization of IDEA '97. During Minnesota's last federal monitoring visit, the monitors stated that greater efforts are needed to prevent misidentification and the relatively high dropout rates among minority children with SLD. There is some evidence that disproportionality is increased by poverty, limited life experiences, and limited opportunities for success.

In Minnesota, methods for reducing bias in assessment for students who have Limited English Proficiency (LEP) have been available for some time. The *Resource Handbook for the Assessment and Identification of LEP Students With Special Needs*, 1991, Minnesota Department of Children, Families & Learning, which may be obtained through Minnesota Educational Services (phone 1-800-652-9024) provides these methods. Even though somewhat dated, the procedures are sound and may be followed with confidence. A new resource, *Reducing Bias in Special Education Assessment for American Indian and African American Students,* is also available from Minnesota Educational Services.

There is the potential for bias in the assessment process in each of the required criteria components of SLD. It is very important to follow recommended procedures for reducing bias in assessment not only because of disproportionality but also because of requirements in federal rules that mandate these procedures. The following information may assist teams in reducing bias when assessing for SLD eligibility.

Review of Existing Data

The team must make certain there is documentation of the history of the student's schooling including number of schools attended, attendance record, grades and dates, success or problem areas, special programs in either general or special education, and changes in home and family situation, or health conditions that may impact achievement in school. A team may gather this information using the Home and Family Interview (see Black Line Masters).

It is recommended that teams analyze the influence of diversity factors on the performance of the student in the classroom using a sociocultural checklist and other information gathered during the prereferral process using forms and procedures from the resources mentioned above.

Reducing Bias in Severe Underachievement

The method used to assess severe underachievement must be representative of the student's curriculum and be useful for developing Individual Education Program (IEP) goals and objectives. Performance-based measures, work samples, and other informal measures may be used to determine severe underachievement.

Assessing Minority Students with Learning and Behavior Problems (Collier, I988), suggests that bias in norm-referenced instruments occurs for several reasons:

- experiential background
- socioeconomic status
- family history
- cultural background
- sociolinguistic background
- gender

It is important to determine if there is cultural bias in testing instruments and procedures. For cumulative record reviews, classwork samples, anecdotal teacher records, formal and informal tests, curriculum-based assessment results, or results from instructional support programs such as Title I, the following questions may prove helpful:

1. Does the testing instrument or procedure include flexible or alternative scoring options for students who are culturally or otherwise diverse?

2. Does the testing instrument or procedure include minority or diverse populations in its norming sample?

3. Does the testing instrument or procedure cover skills the student has had an opportunity to learn?

4. Does the testing instrument or procedure contain scoring mechanisms that are only based on the teacher's cultural expectations?

Other test selection checklists and procedures are available in the resources previously mentioned. After reviewing the tests and procedures, perform the underachievement assessment and the SLD Observation using professional guidelines.

SLD Observation

It is required by Minnesota rule that an observation be conducted by a a team member other than the regular teacher in the general education classroom setting (for ECSE, it must be included in an environment appropriate for a child of that age). It may be appropriate to have a trained cultural representative observe the student or assist in interpreting observation results.

Modifications may need to be made to the observation form or protocol (eliminating or replacing some items as appropriate) based on the student's background. Further information may also be needed about the cultural relevance of some academic behaviors.

The observer must make certain that the student is compared to a group of culturally similar peers as well as a group of culturally dissimilar peers when observing classroom performance. Direct and systematic observation techniques should be used. More than one observation may be necessary to verify results.

Culturally-Based Academic Behaviors

During testing sessions or other observations, examiners may observe the behaviors and responses in the following chart. If appropriate, responses or observations of each item should be examined in a cultural context by comparing it with the information gathered on a sociocultural checklist and/or the Home and Family Interview.

Achievement Area	Culturally-Based Academic Behaviors
Basic Reading Skills	– Reluctance to read aloud – Mispronunciation of certain words – Difficulty going from visual cues to auditory or vice versa – Unfamiliarity with certain types of reading materials – Better functioning when family member is present or when in a group – Very slow rate – Better performance when learning is embedded in a game – Poor word attack skills
Reading Comprehension	– Trouble with interpretive questions – Trouble with sequencing from beginning to end – Problems separating facts from inferences – Trouble drawing if ... then conclusions – Trouble identifying some concepts such as time (before, after, first, second, third) – Trouble understanding language written in formal register – Trouble understanding consequences
Mathematical Calculation	– Trouble with math processes requiring drill and practice – Uses visuals to calculate (i.e., fingers, drawings) – Reluctant to ask questions – Reluctant to volunteer – Overly concerned with being right

Mathematical Reasoning	– Excessive dependence on teacher to begin work – No participation in class discussion – Finishing is more important than correct answers – Wants to work with others and not independently – Nonlinear thinking – Difficulty setting up problems – Trouble distinguishing relevant from irrelevant information
Written Expression	– Poor spelling – Forgets previously learned grammar structure and rules – Only seems to have casual register of language available – Trouble with organizing thoughts on paper – Writing sequence is difficult – Trouble with new concepts – Difficulty with inductive or deductive reasoning – Trouble finishing work

Reducing Bias in Severe Discrepancy

The determination of a severe discrepancy between ability and achievement is made through standardized tests verified by other means and computed using the Minnesota Regression Table. It is required that a standardized individually administered intellectual and achievement battery be given during each SLD assessment. Supplemental data must be collected to verify scores and to identify specific skill deficits.

Scores on ability and achievement tests for minority students or students who are otherwise diverse may not be as reliable in establishing a severe discrepancy as they are for other students. There may be differences in educational, linguistic, cultural, or economic background for minority students that impact the test scores. When testing a minority student, care must be taken to:

- Verify the validity of the results of both the general intellectual ability and achievement portions of the assessment using supplemental tests or procedures.
- Determine the effects of culture or bias on the derived scores (Information may be gathered through a sociocultural checklist or Home and Family Interview).
- Determine whether or not the derived scores are representative of the student's functioning through an analysis of work samples and teacher observation.
- Verify the presence of a severe discrepancy using the Minnesota Regression Table and an analysis of the available information.
- In extreme cases, use an override procedure.

Intellectual Ability

Intellectual ability should be assessed by a licensed school psychologist who follows professional practices regarding test selection, validity, and reliability for minority and otherwise diverse students or for students whose primary language is not English.

In addition to considering technical validity and reliability, school psychologists should also keep in mind how individual students respond to tests and the need to establish rapport, which may be affected by the student's cultural background. Assessors should refer to previously mentioned resources for recommended procedures.

Following are some recommendations for appropriate supplemental assessment instruments from the Minnesota School Psychologists Association. Assessors should use the most recent version of the tests. It may also be found in Section 5: Severe Discrepancy.

Recommended Tests	Publisher
Differential Ability Scales (DAS)	Psychological Corporation
Wechsler Intelligence Scale for Children-III (WISC III)	Psychological Corporation
Wechsler Adult intelligence Scale III (WAIS III)	Psychological Corporation
Wechsler Preschool and Primary Scales of Intelligence III (WPPSI III)	Psychological Corporation
Woodcock-Johnson Psychoeducational Battery-Revised	The Riverside Publishing Company
Kaufman Adolescent and Adult Intelligence Test (KAIT)	American Guidance Service, Inc.
Das-Naglieri Cognitive Assessment System	The Riverside Publishing Company

Supplemental Assessment and Data Sources for Intellectual Ability

If necessary, follow up with supplemental instruments or data sources that focus on specific intellectual strengths and weaknesses. The following instruments and procedures are recommended by the Minnesota School Psychologists Association for this purpose.

Supplemental Tests	Publisher
Kaufman Assessment Battery for Children (K-ABC)	American Guidance Service, Inc.
Wide Range Assessment of Memory and Learning	Western Psychological Services
California Verbal Learning Test-Children's Version	Psychological Corporation
Test of Nonverbal Intelligence III (TONI-III)	American Guidance Service, Inc.
Comprehensive Test of Nonverbal Intelligence (C-TONI)	American Guidance Service, Inc.
Naglieri Test of Nonverbal Ability	Harcourt Brace, Inc.
Leiter International Performance Scale-Revised	C.H. Stoelting Co.

Data gathered through standardized instruments must be verified with additional data sources such as the following:

- criterion-referenced instruments
- dynamic assessment procedures such a test-teach-retest method
- observation and analysis of problem-solving and task completion
- home visits
- natural environment assessment
- observation

Achievement

The purpose of assessing a student's achievement is to determine the degree to which the suspected SLD impairs a student's ability to function in school, determine eligibility, and to provide information for educational programming. Other information gathered from performance-based measures, diagnostic tests, observations, and other methods is required to corroborate findings on standardized achievement instruments. When interpreting achievement scores of a minority or culturally diverse student, special attention needs to be paid to a student's opportunity to learn.

Bias in Testing Procedures

Since reasons for a student's low performance on a standardized test may vary, it is important to verify scores reported with informal and/or performance-based measures of achievement. The assessor needs to determine if there is bias in the instruments, formal or informal, used to assess achievement. Making this determination requires an awareness of the effects of culture on the assessment instrument. As a consequence, each assessor should complete a self-test for cultural awareness. The information gathered should be used to make certain selected assessment tests or methods do not reflect the biases of the assessor (see *Reducing Bias in Special Education Assessment for American Indian and African American Students [Minnesota Department of Children, Families, & Learning, 1998]* for an example of a self-test).

In SLD assessments, one or more of the following areas of academic achievement are assessed:

- basic reading skills
- reading comprehension
- mathematical calculation
- mathematical reasoning
- written expression
- oral expression
- listening comprehension

Test Selection

The team identifies the academic areas to be assessed based upon the review of existing data. In most cases, the assessor will begin with one or more standardized instruments to identify broad areas of strengths and weaknesses and then will assess further with additional procedures and tests. It may be necessary to use more than one instrument to analyze specific areas of functioning when broad-based instruments do not adequately address the learning styles or cultural norms of the minority or otherwise diverse student.

It is recommended that a test selection checklist, such as that found in Sattler's (1988) *Assessment of Children's Intelligence and Special Abilities*, be used to identify appropriate instruments. The assessor should choose tests carefully on the basis of access, strength of norms, reliability and validity of the test, format, time limits, etc. If necessary, a skilled and trained assessor may use a procedure such as "the testing of limits" procedure described by Sattler if it is determined that standard procedures will not work with the student.

Assessors should also keep in mind individual student's differ in their responses to the format of various achievement tests. For example, the cloze and other procedures may be difficult for non-standard English speakers in measures of reading comprehension. In another situation, a student may be reluctant to read aloud due to cultural issues thus making it difficult to accurately assess reading fluency. These situations may be related to the student's cultural background rather than to the attainment of skills by the student. It is important for the assessor to assume that standardized tests are necessarily culturally fair.

Any alterations to the standardized testing format or directions invalidate the testing conditions and must be noted in the Assessment Summary Report (ASR). The derived scores are no longer valid but may nonetheless provide the team with valuable qualitative data that reflects the student's achievement level under different conditions may not be used to calculate a severe discrepancy for SLD eligibility with

conditions. "Testing of limits" scores or scores derived from otherwise altered testing the exception of LEP students. There are special procedures to use when assessing students with LEP (refer to page 7-1).

Recommended Achievement Tests

According to Minnesota rule, tests must be administered by trained and licensed personnel. Unless otherwise noted, a specific learning disabilities teacher will usually administer and interpret achievement tests. The following standardized instruments are recommend by the SLD assessment committee. Assessors should administer the most recent version of the instrument. Reviews of each of these instruments are included in the latest editions of *Assessment in Special Education* (Salvia & Ysseldyke, 1988) Sattler's (1988) *Assessment of Children's Intelligence and Special Abilities*, and in other references.

Clinical Evaluation of Language Fundamentals 3 (CELF 3) *(Psychological Corporation)*
Usually administered by a speech/language pathologist

Standard Scores for:
- Receptive Language (Listening Comprehension)
- Expressive Language (Oral Expression)

Kaufman Test of Educational Achievement, Comprehensive Version (KTEA)
(American Guidance Services)

Composite Scores only:
- Mathematics
- Reading

Oral and Written Language Skills - (OWLS) *(American Guidance Services, Inc.)*
Administered by either a trained SLD teacher or speech/language pathologist

Standard Scores for:
- Oral Expression
- Listening Comprehension

Wechsler Individual Achievement Test (WIAT) *(Psychological Corporation)*

Composite Scores only:
- Reading
- Language
- Mathematics
- Writing

Woodcock-Johnson-Revised, Tests of Achievement (WJ-R) *(Riverside Publishing)*

Standard Scores for:

Broad Clusters
- Broad Reading
- Broad Mathematics
- Broad Written Language

or

Basic Skills Clusters
- Basic Reading Skills
- Basic Math Skills

or

Applications Clusters
- Reading Comprehension
- Mathematics Reasoning
- Written Expression

Supplemental Achievment Testing and Procedures

When assessing for a suspected SLD, the team must gather data on student achievement from sources other than standardized tests. Anecdotal information from parents and general education teachers; diagnostic, curriculum, and other performance-based measures, are frequently used to develop IEP goals and objectives and may also be used to verify standardized test results. Following recommended procedures for supplemental information data gathering is just as important to the validity of the information as it is on standardized instruments. Special attention needs to be paid to the minority or otherwise diverse student's opportunity to learn. If the student has had no opportunity to learn academic skills, the referral for a special education assessment may not be appropriate. Prereferral interventions may need to be developed and implemented instead.

Diagnostic Tests

Diagnostic tests and inventories may be used to pinpoint a student's specific academic problem. Some diagnostic instruments, however, do not include minority or otherwise diverse students in their norming populations; some instruments may not be normed at all. However, many diagnostic instruments including the Woodcock Reading Mastery Test, the Key Math Test, and others are normed for some minority populations and may be used with confidence to verify recommended tests results.

A team may also gather supporting data using one or more of the following recommended alternative assessment techniques to verify findings from standardized tests. The Evaluation Assistance Center of Georgetown University (1991) developed the following table to help educators gain a greater awareness of various assessment strategies that can be used to supplement information obtained from standardized tests and other more traditional forms of assessment.

Supplemental Achievement Test Procedures

Technique	Features
Records of Work in Progress	– Provide process information – Allow for instructional intervention prior to outcome product
Portfolio Work Samples	– Provide product information – Provide information on student language development in different contexts
Dialogue Journals	– Provide information on functional reading and writing skills – Encourage language production – Can be used for both assessment and instruction
Naturalistic Observations *(Administered by speech/ language pathologist)*	– Provide information on student language use in different contexts – Provide information on student functional language use
Planned Observations	– Help focus assessment on critical skills – Provide detailed information on student learning process not available through other assessment techniques
Oral Interviews and Role Play *(Administered by speech/ language pathologist)*	– Can be used to elicit specific types of language – Provide information on general oral proficiency in structured environments – Can be used for both assessment and instruction
Story Retellings	– Provide highly structured environments in which to elicit oral speech – Provide information on how student processes oral speech – Can be used for both assessment and instruction
Semantic Maps	– Can be used to monitor reading comprehension, oral comprehension, and content knowledge – Can be used for student self-assessment of writing – Can be used for student self-assessment of writing – Can be used as advance organizers – Can be used for both assessment and instruction
Dictations	– Provide information on student ability to integrate language skills – Provide estimate of overall language proficiency – Can be used for both assessment and instruction
Cloze Procedure	– Provide information on student ability to integrate language skills – Provide estimate of overall language proficiency – Can be used to measure reading comprehension and achievement – Can be used for both assessment and instruction
Writing Samples	– Provide information on functional literacy skills – Provide information on student ability to integrate language skills – Provide information on higher-level thinking skills – Can be used for both assessment and instruction

Reducing Bias in Information Processing

Information processing conditions may be determined using observation techniques in a variety of settings. The verification of an information processing condition relies heavily on professional and team observation and judgment.

Some behaviors found on the information processing data collection forms may be indicators of a potential information processing problem but may also have a potential cultural basis (see Section 6: Information Processing and Section 4: Severe Underachievement).

The behaviors in the chart on the following page are identified in the research literature and in sociocultural checklists as having a potential cultural component. Students exhibiting problems with these behaviors may actually be demonstrating appropriate cultural behavior.

If these behaviors are noted during an observation, interview, or on a checklist, the team should probe further to determine if the observed behavior is the result of different cultural norms or is indicative of an information processing condition. If appropriate, a cultural representative may assist in the interpretation of the observed data.

Culturally-Based Information Processing Behaviors

The student has difficulty with the following behaviors:	
Storage	• responding in time
Organization	• using planning skills • aligning work spatially • sequencing material
Acquisition	• maintaining concentration (distractible) • learning new things easily • understanding
Retrieval	• planning behavior in advance (impulsive) • retaining and recalling sequences • naming or labeling objects or concepts • recalling sounds associated with letters or words
Expression	• participating in classroom activities • recalling sounds associated with letters or words • reading aloud or giving oral reports • demonstrating how to do something
Manipulation	• making inferences • interpreting social cues • summarizing information • differentiating details from key concepts
Additional Social Behavior	• maintaining appropriate behavior level (over or under active) • being independent (overly cooperative and compliant) • handing in assignments on time • completing assignment • responding appropriately to nonverbal communication

Interpretation of Results

As with all assessment data, an interpretation of data must include a synthesis of information obtained from a review of existing data; interviews; observations; standardized, diagnostic and informal testing; and information about the student's background. Other factors to consider include the student's environment, primary language, social, medical, and educational history, and past and current family environments. All testing protocols should be analyzed to identify specific academic problems and patterns of response. Data should then be compared to determine if a consistent level of achievement is demonstrated.

In the case of minority and otherwise diverse students, data are interpreted with regard to information gathered about the student's background. Data from various sources are then compared and team judgment is used to determine if a consistent pattern of performance was demonstrated. Conclusions drawn from the student's performance across all sources are summarized in the team's ASR, which should include the following information when assessing diverse students:

- The examiner's judgment of the appropriateness of the assessment procedures for the student.
- Any known response patterns by members of the student's specific racial cultural group.
- A description of any adaptations made to the instrument in administration procedures or scoring.
- The assessor's degree of confidence in this assessment.
- A statement about the effect of cultural or other diversity factors that may impact a student's performance during the assessment.

SLD Exclusionary Factors

In order to determine that a student has a specific learning disability, the team must also specifically rule out the SLD exclusionary factors as primary causes of the student's underachievement. The team must show that it systematically gathered information related to the exclusionary factors and that it reviewed this information and considered its impact on the student (see Section 8: Exclusionary Factors for recommended procedures).

SLD Exclusionary Factors

- vision, hearing, or motor impairment
- mental impairment
- emotional or behavioral disorders
- environmental, cultural, or economic influence
- history of an inconsistent education program
- lack of instruction in reading or math (IDEA '97)
- LEP (IDEA '97)

Some information regarding the SLD exclusionary factors may be gathered through the Home and Family Interview, a sociocultural checklist, and other assessment procedures outlined in the *Reducing Bias in Special Education Assessment for American Indian and African American Students, (1998)*. Following is a data summary worksheet to ensure recommended procedures for reducing bias in assessment are followed by the team.

Student's Name _____ Grade ____ Birth Date _____

General Education Teacher _____ Date _____

Assessor _____

SLD Diversity Worksheet

SLD Diversity Worksheet

When assessing diverse students, it is recommended the team gather and consider information from a variety of sources, including observations, adaptive behavior scales, classroom samples, and other types of data collection strategies. Teams must document their consideration of procedures used to reduce bias in the assessment process. This form may be attached to the ASR to provide documentation.

Assessment using the following data collection methods is recommended to provide information to reduce bias in assessment:

- ❑ Observation
- ❑ Sociocultural Checklist
- ❑ Home and Family Interview

Criteria	Data Source	Interpretation
Severe Underachievement Severe underachievement verified by observation? ❑ yes ❑ no	(Check all that apply) ❑ cumulative record reviews ❑ classwork samples ❑ anecdotal teacher records ❑ formal and informal tests ❑ curriculum-based assessment results ❑ results from instructional support programs such as Title I Parent Information	

Criteria	Data Source	Interpretation
Severe Discrepancy *(check those that apply)* ***Intellectual Ability*** ❑ standardized instruments ❑ supplemental procedures ❑ other data sources ***Achievement*** ❑ basic reading skills ❑ reading comprehension ❑ mathematical calculation ❑ mathematical reasoning ❑ written expression ❑ oral expression ❑ listening comprehension Severe discrepancy verified by observation? ❑ yes ❑ no	Parent Information	
Information Processing *(check all that apply)* ❑ storage ❑ organization ❑ acquisition ❑ retrieval ❑ expression ❑ manipulation Occurs in a variety of settings? ❑ yes ❑ no Setting (circle): home, school, community, work site	Parent Information	

SLD Diversity Worksheet

Criteria	Data Source	Interpretation
Exclusionary Factors Must be ruled out as a primary cause of the student's under-achievement. *(check those that apply)* ❑ vision, hearing, or motor impairment ❑ mental impairment ❑ emotional or behavioral disorders ❑ environmental, cultural, or economic influence ❑ history of an inconsistent educational program	Parent Information	
Sociocultural Factors Impact of diversity on student's school performance *(check those that apply)* ❑ race and culture ❑ communication ❑ socioeconomic status ❑ other	Home and Family Interview	

According to IDEA '97, a student is **not** eligible for special education services if either of the following is the determinant (primary) cause for the learning problem. Place a check in the appropriate box below:

A lack if instruction in reading or math	❑ yes	❑ no
Limited English Proficiency	❑ yes	❑ no

Based on assessment data and other sources of information collected for the student the team has concluded that:

The student meets SLD criteria? ❑ yes ❑ no

The student is in need of special education and related services? ❑ yes ❑ no

Exclusionary Factors

Under Minnesota and Federal rules, a student does not meet specific learning disability (SLD) criteria if his or her underachievement is ***primarily*** the result of the following factors:

1. vision, hearing, or motor impairment
2. mental impairment
3. emotional behavioral disorders
4. environmental, cultural, or economic influences
5. a history of an inconsistent education program
6. lack of instruction in reading or math (IDEA '97)
7. Limited English Proficiency (IDEA '97)

IDEA '97 requires the elimination of two additional exclusionary factors: lack of instruction in reading or math and Limited English Proficiency (LEP). A student shall not be found to have a disability "if the determinant factor (primary cause) for such determination is lack of instruction in reading or math or LEP (IDEA 97)."

1. Vision, Hearing, and Motor Impairment

In order to attribute the primary cause of underachievement to a vision, hearing, or motor impairment, a student must qualify under Minnesota special education eligibility criteria or have a Section 504 diagnosis. If the student has a vision, hearing, or motor impairment, the team must determine that the impairment is not the primary reason for the student's severe underachievement. It may be difficult for the team to determine the effects of a vision, hearing, or motor impairment on achievement. Students who display difficulty in vision, hearing, or motor functioning should be screened by appropriate school personnel to determine if further assessment is necessary.

Vision Impairment (Blind/Visually Impaired, M.R.3525,1345)

A vision impairment is medically diagnosed by a licensed eye specialist. It includes problems with visual acuity, visual field, or congenital or degenerating eye condition (i.e., progressive cataract, glaucoma, retinitis pigmentosa, albinism, or nystagmus). In an educational setting, a vision impairment limits a student's access to educational media and program appropriate materials if no accommodations are provided.

Hearing Impairment (Deaf/Hard of Hearing, M.R.3525.1331)

Hearing impairment is verified by a certified audiologist and affects hearing in terms of a sensorineural, conductive, or unilateral sensori-neural or persistent loss. It affects a student's educational performance in academic achievement, use, and understanding of spoken English, or adaptive behavior affecting social functioning.

Motor Impairment (Physical Impairment, M.R.3525.1337)

A physical impairment is a documented medically diagnosed condition that affects a student's ability to manage or complete the motoric portions of classroom tasks within time constraints. In an educational setting, it also affects a student's organizational and independent work skills as well as academic achievement.

Questions to ask about Vision, Hearing, or Motor Impairments

Some additional questions for teams to ask in making the determination of whether or not a vision, hearing, or motor impairment is the primary cause of underachievement follow.

1. Does the team have enough information to determine whether or not a student has a vision, hearing, or motor impairment?

2. Does the vision, hearing, or motor impairment restrict the educational progress of the student?

3. Is the student's severe discrepancy or severe underachievement a result of the effects of a vision, hearing, or motor impairment?

2. Mental Impairment (Mild to Moderate Mentally Impaired, M.R.3525.1333)

In order to attribute the primary cause of a student's underachievement to a mental impairment, a student must qualify under Minnesota eligibility criteria or have a Section 504 diagnosis. A mental impairment is determined by a team and an appropriately licensed school psychologist using Minnesota's eligibility criteria for MMI. A mental impairment is a condition defined by limitations in adaptive behavior (below 15th percentile) and very low scores on an individually administered intelligence test (an IQ score of 50-70). In an educational setting, a mental impairment affects the student's ability to learn and retain academic and independent living skills.

If it is determined that a student meets the criteria components for a mental impairment, the team must rule out the effects of limited intellectual ability on academic underachievement. It is the responsibility of the team to identify the expected level of achievement for students with low ability scores.

Questions to ask about a Mental Impairment

Some additional questions for the team to ask in making the determination of whether or not a mental impairment is the primary cause of underachievement follow.

1. Does the team have enough information to determine whether or not a student has a mental impairment?

2. Does the mental impairment restrict the educational progress of the student?

3. Is the student's underachievement a result of the effects of a mental impairment?

3. Emotional or Behavior Disorders (M.R.3525.1329)

In order to attribute the primary cause of a student's underachievement to an emotional or behavioral disorder (EBD), a student must qualify under Minnesota eligibility criteria or have a Section 504 diagnosis. Emotional or behavioral disorders are manifested in the inability to relate to peers and adults; attention problems related to excessive preoccupation; thought disorders; depression; excessive aggression; tendencies to develop psychosomatic symptoms or phobias associated with social/school situations. Many students with SLD also exhibit emotional or behavioral problems that are not disorders but may be caused by continuous frustration and failure in school.

The review of existing data should provide guidance for the team in determining if the social/emotional domain needs to be assessed. It is extremely important that parent(s) are consulted and interviewed when there are behavioral concerns. The school psychologist, EBD teacher, and social worker may also need to be involved in the assessment.

The team must consider a student's personal and social adjustment, including relationships with peers, siblings, parent(s), teachers, and other adults. These adjustments and other relationships should be observed or documented in a variety of settings within the school, home, and community.

These data may be obtained through multiple sources such as behavior checklists and rating scales; parent, family, and teacher interviews; and structured, objective observations. One SLD observation is required, but may be more appropriate if there is a question as to whether the student's primary disability is a specific learning disability or an emotional or behavioral disorder. A student with achievement difficulties that are primarily the result of emotional problems does not meet SLD criteria.

Questions to ask about EBD

Some additional questions for the team to ask in making the determination of whether or not an emotional or behavioral disorder is the primary cause of underachievement follow.

1. Is there a long history of emotional or behavioral problems such as impulsive behavior, violence, truancy, cutting classes, etc. from kindergarten or first grade on?

2. Is there a long history of withdrawn, sullen, or depressed behavior, or a loss of motivation?

3. Has there been a sudden change in the behavior of the student?

4. Is there a correlation between behavior problems and poor school performance? Was one noticeable before the other?

5. Does the student's behavior impede the student's learning and the learning of others?

4. Environmental, Cultural, and Economic Influences

Environmental, cultural, and economic influences that negatively impact a student's performance need to be determined through multiple data sources.

Environmental or Economic Influences

Environmental and economic influences such as poverty; lack of adequate housing, food, clothing; and environmental risks of lead exposure, etc. must be ruled out as primary causes for a student's underachievement. This is a difficult task since some environmental and economic influences are also risk factors for SLD. While it is important to respect the family's privacy and dignity, understanding the student's economic and environmental situation is important to the prereferral and assessment process for SLD.

Environmental or economic influences are not, in themselves, exclusionary factors. When environmental or economic influences unreasonably restrict the educational progress of a student, they become educational disadvantages. Researchers suggest that environmental or economic influences cause a disadvantage when they are sufficiently intense to impede a student's attainment of reasonable expectations and aspirations.

Some researchers note that these factors can even influence a student's biological or neurological makeup in the realms of thinking, acting, and speaking. In fact, recent brain research identifies windows of opportunity for young students who, if not appropriately stimulated by their parent(s) or their environment, have a much more difficult time acquiring concepts and language (Kotulak, 1996).

The distinction between a student who is not making reasonable educational progress because of a specific learning disability and the student who is not making reasonable educational progress because of a disadvantage is a diagnostically difficult and socially sensitive issue. Compounding this difficulty are the students with SLD who also have environmental influences.

The team must identify areas of possible environmental or economic influences based upon a review of existing data, screening, referral, and prereferral information, and when appropriate, obtain further information in order to carefully consider this issue. Only in those circumstances where the team can reasonably attribute the primary cause of the severe underachievement to environmental or economic influences should the student be excluded from SLD eligibility.

Some indicators of environmental and economic influences used by the federal government and by researchers include the following:

- Student participates in a subsidized lunch program.
- Family income is at or below national or local poverty level.
- Parent(s) are unemployed.
- Parent(s) are recipients of public assistance.
- Student or parent is under the guardianship of another person or agency.
- Student has unusually limited experiential background.

Cultural Influences

The team must also consider the effects of culture on a student's underachievement. Culture is the shared ideas, customs, values, skills, arts, and philosophy of a group of people. The influence of culture in special education may occur when a student's dominant language is not English or the student is a member of a minority or is otherwise diverse. Two references available for addressing this issue are *Reducing Bias in Assessment for American Indian and African American Students, 1998,* and *Resource Handbook for the Assessment and Identification of LEP Students With Special Needs*, 1991, which may be obtained through Minnesota Educational Services, phone 1(800) 652-9024. Even though the last reference is somewhat dated, the procedures are sound and may be followed with confidence.

Use the Home and Family Interview and a sociocultural checklist to gather information about cultural influences (see Section 7: Reducing Bias). For students whose dominant language is not English, accommodations may need to be made in assessment procedures. The student should be assessed in his or her primary language if possible.

If appropriate, the ESL teacher and/or a cultural representative (may be a home/school liaison) should be included as members of the team to discuss possible cultural differences. Some cultural or religious beliefs may impact a student's educational growth. Some examples would be the effects of no television in the home; prohibitions on holidays and other celebrations; restrictions on dress and diet; different concepts of appropriate verbal and non-verbal behavior; language patterns, etc.

Every effort must be used to reduce the effects of bias in the assessment process using the recommended procedures in Section 7: Reducing Bias. After the recommended procedures have been used, it is the responsibility of the team to determine whether or not cultural influences are the primary cause of the student's underachievement.

Questions to ask about Environmental, Cultural, or Economic Influences

Most environmental, cultural, or economic influences are addressed on the Home and Family Interview (see Section 4: Severe Underachievement). Some questions for the team to ask in determining whether or not environmental, cultural, or economic influences are the primary reason for a student's underachievement follow.

1. Did one or both parents have difficulty in school (i.e., repeating grades, truancy, suspension, or expulsion), and as a result, were they excluded from some educational experiences?
2. Has the student been excluded from some educational experiences due to suspension, expulsion, truancy, or other factors?
3. Are there any concerns about the family's housing situation (i.e., overcrowding of family dwelling, extended family residing in single family home, disconnected utilities or telephone, homelessness) that may impact the student's ability to learn or attend school?
4. Are there any factors inhibiting the parent(s) ability to communicate with school personnel (i.e., language issues, transportation issues, no telephone, difficulty with receiving or responding to written school communications)?
5. Are there issues for this student with supervision by nannies, extensive parent travel, restricted parent schedule, and other factors such as another caretaker in the home?

5. History of an Inconsistent Education Program

The student with a history of frequent or extended absences from school or with a history of frequent moves from one school to another, resulting in discontinuity of instruction, is not typically appropriate for referral for special education assessment. The effects of an inconsistent education program must be ruled out as a primary reason for the student's underachievement. If other general education, compensatory, or remedial programs have been provided and found to be inadequate, it may then be appropriate to refer the student for a special education assessment.

Questions about an Inconsistent Education Program

Some questions for the team to ask in determining whether or not an inconsistent education program is the primary reason for the student's underachievement follow.

1. Is school attendance impeding the student's ability to learn?

   Attendance: last six months _____
   last year _____
   last two years _____

2. Has the student attended more than one school in the past year? If so, how many?
3. Has the student ever attended school?
4. Does this student have to care for siblings when parents work?
5. Is this student caring for his or her own child?
6. Are there any other factors (medical or other) impacting school attendance?

6 & 7. Lack of Instruction in Reading and Math and Limited English Proficiency (IDEA '97)

A student shall not be found to have a disability "if the determinate factor (primary cause) for such determination is lack of instruction in reading or math or limited English proficiency (IDEA '97).

Lack of Instruction in Reading or Math: The team should review the Home and Family Interview and a sociocultural checklist for information about the school and instructional history of the student. If a student has had little exposure to the general education curriculum in reading or math, the team must establish that this is not the determinate factor or primary cause of the learning problem.

Limited English Proficiency (LEP): The team should review information regarding the student's native language and English language proficiency found in the Home Language Questionnaire (completed at enrollment), the Home and Family Interview, and a sociocultural checklist as well as the school district's referral form. If the learner is LEP, the team must establish that this is not the determinate factor or primary cause of the learning problem.

What follows is a checklist for teams to use in determining whether or not SLD exclusionary factors are the primary cause for the student's underachievement. Information recorded on this form verifies the team has considered and ruled out exclusionary factors. Much of the information needed may be obtained through the review of existing data, observations, checklist, and the Home and Family Interview. If a team is uncertain about the effects of one or more exclusionary factors, further assessment may need to be performed. This form may be attached to the ASR.

SLD Exclusionary Factors Checklist

Student's Name _____ Grade ____ Birth Date _____

General Education Teacher _____ Date _____

Assessor _____

Using information gathered from the Review of Existing Data, Home and Family Interview, SLD Observation(s), any sociocultural checklists, and other sources, fill in the information on this form.

Vision, Hearing, and Motor Impairment						
Does the student have an impairment in:			If yes, check box if impairment negatively impacts achievement in school.	Is the impairment the primary reason for the student's underachievement?		
	Yes	No			Yes	No
Vision	❑	❑	❑		❑	❑
Hearing	❑	❑	❑		❑	❑
Motor	❑	❑	❑		❑	❑

List sources used to make this determination:

_____ _____

_____ _____

Briefly state the basis for the team's decision and include it in the ASR:

_____

_____

_____

Mental Impairment		
Does the student have a mental impairment? Yes ❑ No ❑	If yes, check the box if the impairment negatively impacts achievement in school. ❑	Is the impairment the primary reason for the student's underachievement? Yes ❑ No ❑

List sources used to make this determination:

_____ _____

_____ _____

Briefly state the basis for the team's decision and include it in the ASR:

_____

_____

_____

Emotional or Behavioral Disorders (EBD)		
Does the student have an emotional or behavioral disorder? Yes ❑ No ❑	If yes, check the box if this disorder negatively impacts achievement in school. ❑	Is the disorder the primary reason for the student's underachievement? Yes ❑ No ❑

List sources used to make this determination:

_____ _____

_____ _____

Briefly state the basis for the team's decision and include it in the ASR:

_____

_____

_____

SLD Exclusionary Factors Checklist

Environmental, Cultural, or Economic Influences

Are any of the following influences an issue for the student?	Yes	No	If yes, check the box if this influence negatively impacts achievement in school.	Is this (are these) influence(s) the primary reason for the student's underachievement?	Yes	No
Environmental	❑	❑	❑		❑	❑
Cultural	❑	❑	❑		❑	❑
Economic	❑	❑	❑		❑	❑

List sources used to make this determination:

_____ _____

_____ _____

Briefly state the basis for the team's decision and include it in the ASR:

_____

_____

_____

History of an Inconsistent Education Program

Does the student have an inconsistent education program?	Yes	No	If yes, check the box if it negatively impacts achievement in school.	Is an inconsistent education program the primary reason for the student's underachievement?	Yes	No
	❑	❑	❑		❑	❑

List sources used to make this determination:

_____ _____

_____ _____

Briefly state the basis for the team's decision and include it in the ASR:

_____

_____

_____

Lack of Instruction in Reading or Math or LEP						
Does the student have a:			If yes, check the box if the issue negatively impacts achievement in school.	Is the issue the primary reason for the student's underachievement?		
	Yes	No			Yes	No
Lack of Instruction in Reading or Math	❑	❑	❑		❑	❑
LEP	❑	❑	❑		❑	❑

List sources used to make this determination:

_____ _____

_____ _____

Briefly state the basis for the team's decision and include it in the ASR:

_____

_____

_____

SLD Exclusionary Factors Determination

❑ The team has determined that an exclusionary factor is not the primary reason for the student's underachievement.

❑ The team has determined that _____ (enter exclusionary factor) is the primary reason for the student's underachievement; therefore, the student does not meet eligibility criteria for SLD.

Reassessment Procedures and Required Documentation

Reassessment of students with specific learning disabilities (SLD) is required every three years by Minnesota and Federal rules. While the purpose of an initial assessment is to determine if a student meets eligibility criteria and to rule out exclusionary factors as the primary cause of a student's academic difficulties, the purposes of reassessment are to:

1. Determine the continued existence of a disability.
2. Determine the extent to which that disability continues to interfere with the student's ability to benefit from a general education program without special education and related services.
3. Ensure that the Individual Education Program (IEP) is conferring educational benefit and meeting the standards for a free and appropriate public education *(Board of Education vs Rowley 458 U.S. 176, 1982).*
4. Determine an appropriate instructional program.

As with an initial assessment, a reassessment must address all three components of SLD criteria:

- **severe discrepancy between ability and achievement**
- **severe underachievement**
- **information processing condition**

The team should include the following members:

- person knowledgeable about and licensed in SLD
- general education teacher
- district representative (can be an administrator)
- parent
- student, as appropriate
- other agency and school personnel as appropriate

Review of Existing Data

As part of the reassessment, the team must review existing assessment data, information provided by parents and teachers, observations and performance-based assessments. The team must carefully consider all domains of assessment in order to determine whether:

- The student continues to have an SLD.
- The student continues to need special education and related services.

The team must also determine:

- The student's present levels of performance and educational needs.
- Additions or modifications to the program to meet the student's IEP goals and ensure participation in the general education curriculum.
- There is educational benefit from current programming.
- The student has access to general education curriculum supports (counseling, remedial reading, study sessions, etc.).

For a student with SLD these questions typically translate into determining if there is sufficient information about the student's:

- General intellectual ability.
- Academic achievement skills.
- Information processing condition.
- Communication skills.
- Social or behavior skills.
- Language skills.
- Coping strategies.
- Post-secondary transition assessment (by age 14 or grade 9) in the following five areas:

  employment; post-secondary education and training; community living, experience, and participation; recreation and leisure; and home living/daily living skills.

If the team determines it has sufficient information regarding the areas noted above, parent permission to assess does not have to be sought, but parent input is required. the SLD eligibility components must be discussed, documented, and summarized in an ASR. If the team does not have sufficient information, it must identify the appropriate areas to include in the reassessment and follow due process procedures.

Continuing Existence of a Specific Learning Disability

For a reassessment the team must have enough information about the student to document the continued existence of a specific learning disability. This includes:

- A discrepancy between ability and achievement with supporting evidence from classroom performance.
- An information processing condition.
- Underachievement in response to usual classroom instruction (developmentally appropriate academic opportunity and instruction).
- Classroom observation supporting the student's eligibility and continued need for service.
- Information obtained from the parent(s).
- A continuing need for special education instruction and related services to benefit from the general education program.

When determining the continued existence of a specific learning disability, the team should recognize that as a student benefits from special education services, increases in achievement scores and academic functioning can be expected. At the time of reassessment, a student may not (and does not have to) demonstrate a severe discrepancy between ability and achievement at the level required for initial eligibility (-1.75 standard deviations). However, the student is still expected to demonstrate a discrepancy between ability and achievement at a significant although a lesser level. Similarly, a student may improve in an academic or other skill area over time and may not demonstrate as severe a level of underachievement. Information processing deficits will still be present.

Conferring Educational Benefit

Reassessment is a time to make certain the individual educational program is conferring educational benefit and is meeting the standards for free and appropriate public education (Board of Education vs Rowley 458 U.S. 176 [1982]). The team determines if the IEP is meeting the student's educational needs and establishes the direction for planning the next three years of special education instruction and related services.

Following are some questions to ask.

1. Do present levels of performance show growth over time in areas of assessed need or presenting problem(s) [academic skills, functional skills, social skills, and the student's ability to use accommodations effectively]?

2. Do the IEP goals and objectives reflect improvement over time?

3. Are the IEP goals and objectives derived from the student's present levels of educational performance and assessed needs?

4. Has the team considered assessment information from other sources (cumulative record review, Title 1, ESL, classroom work samples, anecdotal teacher records, standardized and informal tests, performance-based measures, general education instructional support programs, parent and student information, and group and statewide tests)?

   [1]Cautionary Note: Statewide testing instruments typically are not sensitive enough to determine whether or not educational benefit has been conferred in special education programs. These tests are designed as a group-sorting mechanism.

5. Was the student and parent information included in determining the student's progress?

6. Has the student had access to <u>all</u> general education supports (counseling, 504 plan, peer tutoring, student mentor, gifted and talented programs, etc.)?

The answers to these questions will help the team identify needed changes in the student's IEP.

Transition Planning

In addition to the program planning that takes place at the annual IEP meeting, reassessment is a time to take a broad look at future planning.

Following are some key questions to ask.

1. Are there any school related needs that have emerged since the last reassessment?

2. Are the priorities and long-term expectations of the student and parent included?

3. Does the IEP target the use of skills across settings?
   - Does the student possess the targeted skills and not use them consistently?
   - Does the student need to be taught the skills?
   - Is a program to increase the use of skill(s) needed?
   - Will the skills be functional and useful to the student in the future?

4. Are coping strategies and accommodations identified?

5. Does the IEP include student strengths in determining goals, objectives, and instructional methods?

6. Does the student need accommodations, modifications, or an exemption for state basic requirements testing?

7. Has the team addressed the five transition areas: employment; post-secondary education and training; community living, experience, and participation; recreation and leisure; and home and daily living skills by age 14 or grade 9?

8. Has the team considered other educational programs such as community-based supports?

9. Does the student have the entry level skills for desired career, post-secondary vocational, or educational programs?

10. Can the student fulfill the entrance requirements (entrance exams, portfolios, prerequisites, etc.) for the student's career choice?

Due to suggestions from the field, there will be additions to this section including a sample Assessment Summary Report (ASR) for a student with a specific learning disability (SLD). A replacement section containing revised material will be mailed to the directors of special education during the fall of 1999. In the interim, please refer to the Minnesota State Recommended Due Process Forms Directions, September 1998, for guidance in composing an ASR.

The following section includes an ASR outline, a narrative, and charts for explaining SLD eligibility criteria to parents, students, and others.

SLD Assessment Summary Report Outline

What follows is a sample outline for the required elements in an ASR for a student with SLD.

I. Information reported by parents

A. Student history and concerns
B. Severe underachievement and severe discrepancy
C. Information processing

II. Review of Existing Data
(all required eligibility criteria and any presenting problems)

A. Review of existing data
B. Current assessment results (if any)
   1. General intellectual ability
   2. Achievement (in areas of presenting problem and SLD eligibility)
   3. Information processing
   4. Other (motor, functional skills, sensory status, emotional, social and behavioral development, communication, health/physical status, as indicated)

III. Systematic Classroom Observation

A. SLD observation(s)
B. Other observation(s)

IV. Educationally Relevant Medical Information

A. Medically diagnosed conditions
B. Chronic health problems

V. Present Levels of Educational Performance
(areas of presenting problem and SLD eligibility criteria)

A. General intellectual ability
B. Academic performance
C. Information processing
D. Other (motor, functional skills, sensory status, emotional, social and behavioral development, communication, health/physical status as indicated)

E. Strengths
F. Information related to involvement and progress in the general education curriculum

VI. Educational Needs

A. Academic skills
B. Behavioral skills
C. Compensatory strategies

VII. SLD Criteria Components and Eligibility Determination

A. Interpretation of assessment results
   1. Severe underachievement
   2. Severe discrepancy
   3. Information processing condition
   4. Other (motor, functional skills, sensory status, emotional, social and behavioral development, communication, health/physical status, as indicated)
B. Eligibility determination
   1. Documentation of severe underachievement
   2. Documentation of severe discrepancy between ability and achievement
   3. Documentation of an information processing condition in a variety of settings

VIII. Special Considerations

A. Factors that impact a student's achievement (blind/vision impaired, deaf/hard of hearing, etc.)

IX. SLD Written Report Components

A. Statement of disability
B. Observed behavior as it relates to academic functioning
C. Discrepancy correctable without special education and related services
D. Exclusionary factors
   1. Vision, motor, or hearing impairment
   2. Mental impairment
   3. Emotional or behavioral disorder
   4. Environmental, cultural, or economic influences
   5. History of inconsistent education program
   6. Lack of instruction in reading or math (IDEA '97)
   7. Limited English Proficiency (IDEA '97)

X. Secondary Transition Areas *(by grade 9 or age 14)*

A. Employment
B. Post-secondary education and training
C. Community participation
D. Recreation and leisure
E. Home and daily living

XI. Needed Additions or Modifications to Special Education and Related Services

A. General education
B. Special education

Explaining SLD Eligibility Information to Parents, Students, and Others

After the ASR is written, it is necessary to explain SLD eligibility criteria to parents and students. The following are guidelines for structuring this explanation. Make certain to translate the guidelines into your own words.

Note: *The following explanations include the presentation of Charts 1 and 2 (pages 10-7,10-8) to parents, teachers, other staff members, and students.*

Parents, Teachers, and Other Staff Members

Share the following information in your own words:

1. There are three criteria components for SLD. They are severe underachievement, severe discrepancy, and information processing *(point to three sections of Chart 1)*.

2. To meet the criteria for severe underachievement, one of these seven achievement areas must be identified *(point to Chart 1, Section A)*. Your son or daughter exhibits a severe underachievement in the following areas: *(point to circled areas, Section A)*. Information used to make this determination was gathered from these data sources *(point to Chart 1, Section A, sources)*.

3. To meet the criteria for severe discrepancy, one of the following areas must meet numerical criteria from the Minnesota Regression Table *(point to Chart 1, Section B)*. Your son or daughter met this criteria in *(point to circled areas, Chart 1, Section B, area[s])*. The severe discrepancy was validated from the following other sources (*point to Chart 1, Section B, sources*).

4. To meet the information processing criteria, your son or daughter must demonstrate a problem in processing information in one of these areas *(point to the SOAR'EM areas, Chart 1, bottom of page)*. Your son or daughter demonstrates this problem in the following areas *(point to Chart 1, Section C, circled area[s])*.

5. Information processing must be documented in a variety of settings such as home, school, and community. The settings are listed on Chart 1*(point to Chart 1, Section C, settings)*.

6. The Information Processing Profile identifies your son or daughter's information processing strengths and areas of concern (*point to Chart 2*).

Students

When explaining assessment results to students, share the following information in your own words:

1. During the testing we gathered information about you in three areas (*point to Chart 1, Sections A, B, and C*).

2. To meet the criteria for severe underachievement, you must have trouble with one of these seven areas *(point to Chart 1, Section A)*. You exhibit a severe underachievement in the following area(s): *(point to Chart 1, Section A, circled area[s])* Information used to make this determination was gathered through these data sources (*point to Chart 1, Section A, sources*).

3. To meet the criteria for severe discrepancy, one of the following areas must meet numerical criteria from the Minnesota Regression Table *(point to Chart 1, Section B, circled area[s])*. The severe discrepancy is validated from the following other sources *(point to Chart 1, Section B, sources)*.

4. In the area of information processing we looked at how you store, organize, acquire, retrieve, express, and manipulate information (define areas and provide descriptors for the student in each area (*point to Chart 1, list at bottom of page*).

5. We gathered this information from you, your parents, your teachers at school, and from observations in your classroom(s) and other settings *(point to Chart 1, Section C, sources)*.

6. The information showed that you have some significant difficulty with: *(point to Chart 1, section C, circled areas)*.

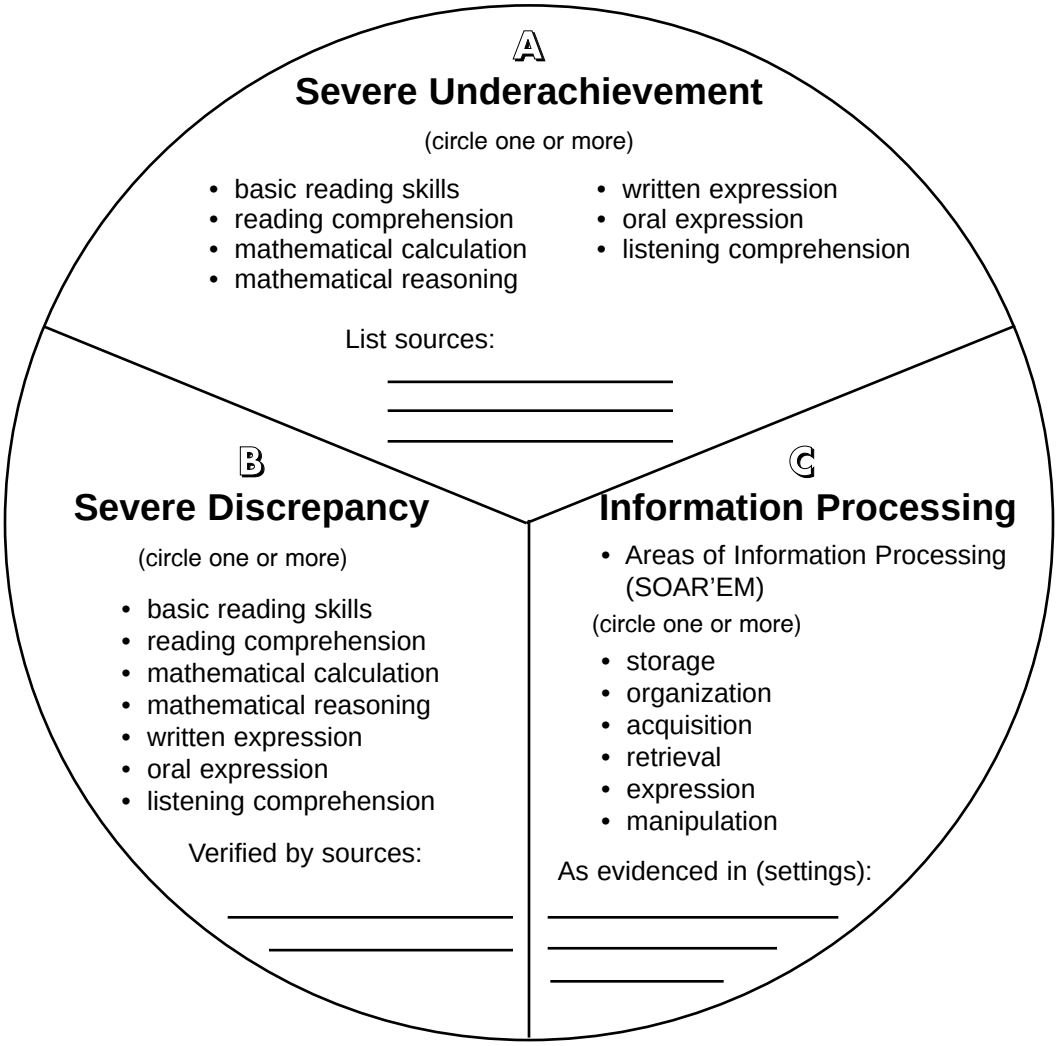
7. (Share some examples from each setting that illustrate the specifics of the problem area–*point to Chart 1*–and explain the possible effects on the student's academic problems.)

8. What are your thoughts about your information processing condition?

9. (Use the Information Processing Profile–*point to Chart 2*.) Here are your areas of strength in processing information.

Chart 1

SLD Eligibility Criteria



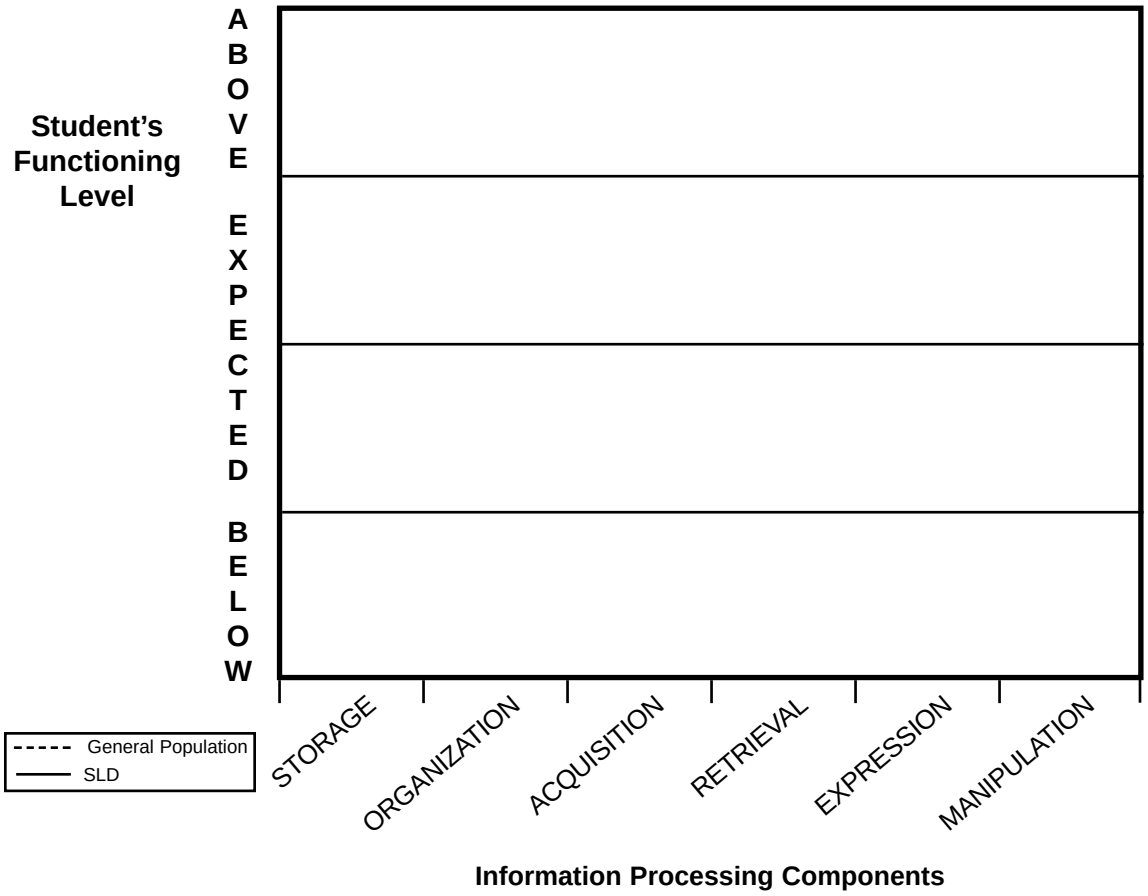
SLD Eligibility Chart

Information Processing Components

Storage: the process of adding information to existing information
Organization: the process of structuring information, i.e., categorizing, sequencing, etc.
Acquisition: the process of accurately gaining, receiving, and/or perceiving information
Retrieval: the process of locating or recalling stored information
Expression: the process of communicating information
Manipulation: the process of applying, using, or altering information

Chart 2

Information Processing Profile



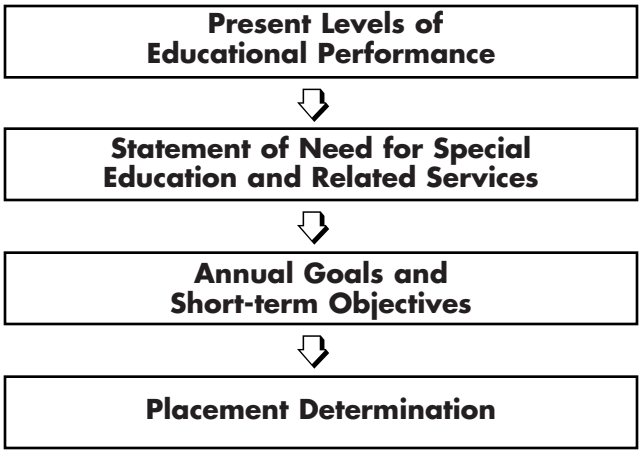
Due to suggestions from the field, there will be additions to this section. A replacement section containing revised material will be mailed to the directors of special education during the fall of 1999. In the interim, please refer to the Minnesota State Recommended Due Process Forms Directions, September 1998, for guidance in developing and implementing an IEP.

This section contains the following topics: Roles and Responsibilities of Team Members, Sample Goals and Objectives, Specially Designed Instruction, Teaching Strategies and Adaptations (accommodations) related to information processing. There will be additions to each of these topics for the SLD components of severe underachievement and severe discrepancy.

IEP and Specially Designed Instruction

IEP Development

The student's performance must be reported on the ASR in terms that help the team develop appropriate instructional programs and identify necessary adaptations (accommodations), which lead directly to appropriate educational goals and objectives. For Individual Education Program (IEP) development the team must develop the following using the assessment results.



Roles and Responsibilities

Role of the Team

The team is responsible for designing and conducting the assessment and then using the information gathered from the assessment process to develop an appropriate IEP designed to meet student needs. To assist in this process the Assessment Summary Report (ASR) contains statements of present levels of educational performance (PLEP) and statements of need in the areas of each specific learning disability (SLD) eligibility component. The data used to develop the PLEP statements and statements of need include the review of exiting data, the assessment and supplemental data, information from parents, observations, medical data, independent assessments, etc. The team needs to develop one goal and two objectives for each need statement (see flow chart). Adaptations (accommodations) and modifications must be considered throughout the IEP writing process.

IEP Areas for Consideration

Adaptations and modifications are based on the student's assessed academic and information processing strengths, weaknesses, and needs related to the SLD in order to "level the playing field" for learning. These adaptations are considered essential services for the student with SLD to learn effectively.

The following checklist is provided to help the team make certain that necessary adaptations are included in all pertinent parts of the IEP.

Adaptations/Modifications Checklist ***Section of the IEP***	**Adaptation(s)**
❑ Part F1: Adaptations (accommodations) In General and Special Education includes assistive technology, specialized transportation, staff, curriculum, modification of grading system, coordination of support services, vocational services, behavioral interventions, modifications of school district and school building discipline policies, etc.	
❑ Part F1: Graduation Requirements	
❑ Part F2: School Personnel Supports	
❑ Part H1: Minnesota Statewide testing (grades 3, 5, 8 and 10+) Adaptations (accommodations) such as extended time, quiet room, frequent breaks, etc., may be necessary for an SLD student due to information processing and other issues. Guidance for decision making on these issues and on exemption from testing are provided in the Directions for Minnesota State Recommended Due Process Forms, September 1998.	
❑ Part H2: Minnesota Basic Standards Testing (grade 8 and above) Adaptations (accommodations) such as extended time, quiet room, frequent breaks, etc., may be necessary for an SLD student due to information processing and other issues. Guidance for decision-making on these issues as well as on passing status (Pass State, Pass Individual or Exempt) are provided in the Directions for Minnesota State Recommended Due Process Forms, September 1998.	
❑ Part I: Special Education and Related Services	
❑ Part J: Extended School Year (includes related services)	
❑ Part K: LRE Placement Determination	
❑ Part L: Altered School Day	

Role of the SLD Teacher

The SLD teacher has an extensive role in developing instructional strategies and communicating about academic and information processing skills and needs.

The SLD teacher:

- Identifies a student's academic and information processing strengths and weaknesses in the assessment.
- Explains the impact of academic and information processing strengths and weaknesses to the student, parent(s), and the general education teacher.
- Asks pertinent questions about essential classroom expectations and requirements to determine if modifications or adaptations are needed.
- Seeks input from general education teacher about the supports needed to be successful in the general education classroom.
- Consults and assists in planning modifications or adaptations of general education curriculum based on academic and information processing strengths and weaknesses.
- Designs and teaches coping and learning strategies based on information processing considerations.
- Monitors student's progress and the success of modifications, adaptations, or strategies in general and special education instruction.
- Writes the appropriate adaptations, modifications, goals, and objectives on the IEP pertaining to academic and information processing considerations.

Role of the General Education Teacher

A general education teacher must be involved in the development of the IEP for a student with SLD. He or she is responsible for implementing the specific modifications or adaptations in general education needed by the student as documented in the IEP. In the case of a secondary student, all general education teachers may be involved in IEP implementation.

The general education teacher:

- Participates as a member of the IEP team.
- Makes adaptations for students with SLD that are tailored to the student's needs to help compensate for academic and information processing conditions.

- Identify essential priority general education curriculum goals as a basis for determining appropriate adaptations to the general education curriculum.
- Uses information processing profiles to develop coping strategies for students based on strengths to improve academic performance in general education.
- Teaches selected coping strategies designed to compensate for academic skill deficits and information processing conditions.
- Assists the student with SLD in carrying out the IEP goals or provides alternatives to general education classroom procedures or assignments as indicated on the IEP.
- Uses teaching techniques in a variety of learning modalities to design instruction aimed at the student's learning strengths.

Role of the Student With SLD

In order for the IEP to be most effective, the student should be involved in the IEP development and implementation process. After the IEP has been developed, the student's responsibility is primarily one of self-advocacy.

The student:

- Develops self-advocacy skills.
- Learns about his or her academic and information processing strengths and conditions.
- Describes his or her academic and information processing strengths and conditions to others.
- Asks teachers for appropriate modifications or adaptations for academic skill deficits and information processing skills.
- Knows rights to adaptations and modifications of general education based on IDEA 1997, Section 504, the Americans with Disabilities Act (ADA), and Minnesota Special Education Rules.
- Understands, generalizes, and uses coping strategies, modifications, and adaptations in a variety of learning and social situations.

Role of the Parent

Revisions in IDEA '97 require increased parental participation in the entire special education assessment process beginning with assessment determination through IEP development and implementation. Parents have a vital role to play in developing, supporting, and implementing the IEP.

The parents:

- Learn about their son or daughter's academic and information processing strengths and weaknesses.
- Advocate with school personnel for the implementation of appropriate modifications and adaptations for their son or daughter based on academic skill deficits and information processing skills.
- Know parents' and student's due process rights under IDEA, 504, Minnesota Special Education Rules, and ADA.
- Seek special training from the school district or through other resources such as Parent Advocacy Coalition for Educationbal Rights (PACER), Learning Disabilities of Minnesota (LDM), or other parent advocacy organizations in order to assist their son or daughter in being successful in general and special education.
- Support IEP program goals or strategies at home.

Sample Information Processing (IP) Goals, Objectives, and Adaptations (Accommodations)

It is possible to write a goal for a specific information processing problem as well as for academic or behavioral skills. Generally, SLD teachers have had extensive training in how to write academic or behavioral goals and objectives but little training in writing goals in the areas of information processing.

Instructional goals must have three components: the direction of change, the behavior to be changed, and the current and ending level of performance.

Objectives (at least two for one goal) should contain the target behavior, the conditions under which the behavior is to occur, the criteria for acceptable performance, and the procedures used to evaluate performance. Objectives must also be observable, measurable, and verifiable.

A goal may be written or an objective may be written to address a specific need in an area of information processing. A coping strategy for information processing might be imbedded within an objective goal. The following example translates an information processing need to a goal.

Information Processing Area: Retrieval

Sample Present Level of Educational Performance for IP

Martha has difficulty remembering information she hears. This affects her ability to follow classroom instructions and discussions. Currently, she follows classroom directions less than half the time.

Sample IP Need

Martha needs to improve her ability to recall information she hears by developing coping skills to compensate.

Sample IP Goal

Martha will improve her skills in recalling classroom instructions presented orally from a level of 50 percent accuracy to a level of 80 percent.

Sample IP Objectives

- Given oral instructions, Martha will ask a peer for clarification in four or five trials as observed by the general education teacher.

- Given oral classroom instructions, Martha will write the directions in abbreviated steps with 90 percent accuracy as measured by the general education teacher.

More objectives should be added as conditions change. Other examples of methods to aid students in retrieval are chunking, mnemonic devices, visualization, using fingers, verbalize in a whisper.

Adaptations (accommodations) Teachers Can Make for Retrieval Problems

- Speak slowly.
- Use overheads/printed information to accompany discussions/lectures.
- Prompt the student to repeat information as it is presented.
- Get the student's attention before speaking.
- Present oral information in segments.

Specially Designed Instruction

Specially designed instruction is based on individual needs determined through assessment and related to the SLD. Team members play different roles in the development of the instructional program. The decisions made by these individuals separately and collectively make the information processing and other assessment data operational. Using the information obtained from the assessment, a team must determine the instructional needs of the student (these must be "assessed needs" and must be related to the disability). The team then makes decisions about the IEP program including any needed modifications and adaptations. Selection of appropriate teaching strategies may be based on information processing strengths. *The selection of coping strategies and adaptations should be made on the basis of areas of deficit.*

There are many different approaches to instructional planning and assessment used in Minnesota. The use of academic skill inventories, diagnostic tests, curriculum-based assessment, and task analysis are a few of the assessment methods to help determine IEP goals and objectives that lead to instruction. There are, however, many advantages in using an information processing approach to instructional planning. An information processing approach:

- Emphasizes the processing of information in solving a task.
- Teaches *how* to learn rather than *what* to learn.
- Focuses on the student as an active learner.
- Relates the student's needs to specific strategies.
- Complements performance-based models of assessment.

What follows is an example of task analysis, another approach to instructional planning, and some adaptations (accommodations) a teacher can make to help a student with SLD compensate for deficits in organizational skills.

Task Analysis

Task analysis is a series of assessment steps used to pinpoint a student's learning problem. It guides the SLD teacher in matching effective teaching strategies to a student's specific needs.

Note: Not all tasks lend themselves to analysis. Tasks that are inherently divergent or are not sequential in nature are not appropriate for this technique.

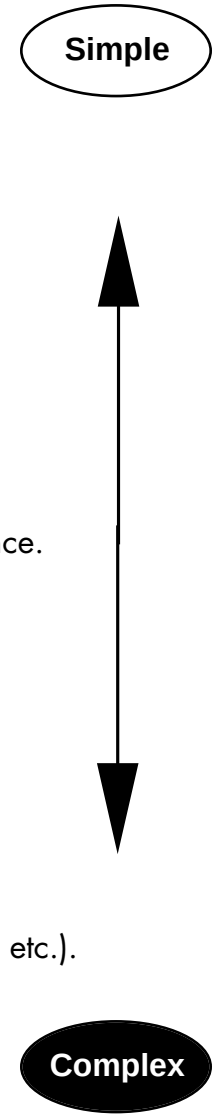
Directions:

1. Think carefully about the specific task chosen for analysis.
2. Determine the components of the task.
3. Examine each component and ask yourself if there are any further divisions within each component.
4. Order components from simple to complex.
5. Determine where the student is having difficulty.
6. Design strategies for teaching the concept.

Sample Task Analysis: Time Management (Organization)

At each point in the task analysis determine if the student has or has not mastered the component. Those components not mastered may be appropriate for IEP objectives under a goal relating to organizational difficulties. The skills not mastered indicate the appropriate place to begin instruction.

Mastered		The student:
Yes	No	
❑	❑	• Has a concept of time.
❑	❑	• Is sensitive to time.
❑	❑	• Understands time management.
❑	❑	• Has a concept of order.
❑	❑	• Understands routine.
❑	❑	• Orders steps in a routine.
❑	❑	• Recalls steps in a routine.
❑	❑	• Applies concept of time to steps in a routine.
❑	❑	• Organizes for single, multiple, or combined steps in a routine.
❑	❑	• Places necessary steps in an efficient action sequence.
❑	❑	• Understands a goal (accomplishment).
❑	❑	• Can determine direction for goal attainment.
❑	❑	• Can sequence steps to obtain the goal.
❑	❑	• Can self-monitor for time and efficiency.
❑	❑	• Understands multiple goals.
❑	❑	• Can compare and contrast.
❑	❑	• Can generalize and predict.
❑	❑	• Can use organizational tools (checklists, schedules, etc.).
❑	❑	• Can prioritize and coordinate multiple activities.
❑	❑	• Uses practiced understanding of organization to accomplish work in an efficient manner.



Matching Teaching Strategies with Task Analysis *(see previous page)*

After using a task analysis to write IEP goals and objectives, it is necessary to match teaching strategies to each objective. There are many teaching strategies, both published and unpublished, designed to teach organizational skills. The following list offers some suggestions.

1. Teach the sequencing of tasks.
2. Provide teacher modeling of thinking aloud about time management.
3. Teach student to observe and replicate effective systems.
4. Develop a language for time; identify major concepts.
5. Teach all procedures to be performed in class; assume nothing.
6. Use problem-solving routines; use mnemonics.
7. Use checklists for components of tasks.
8. Teach self-regulation and incremental procedures such as the use of timers; use a watch with multiple alarms.
9. Use participative goal setting.
10. Develop routines for management using charts or visuals.
11. List steps for assignments (break into parts).
12. Provide time frame for interim indicators for long-term assignments; use a timeline or calendar.

Teaching Strategies

The following are strategies for teachers to use when teaching specific skills to students. (*Please note:* Items in bold faced type are available in published form. For further information contact educational publishing companies.)

Storage

- use think-out-loud method
- use **SQ3R method**
- demonstrate slow-rate listening previewing
- teach **Multipass***
- use check-off systems
- **teach instructional scaffolding**
- teach **Cornell Method**
- teach **Visual Imagery Strategy***
- teach self-regulation procedures
- locate italicized words/phrases
- teach **elaborative interrogation**

Organization

- teach chunking
- teach **semantic mapping**
- follow set daily routine
- clear work area
- develop teaching system for homework
- keep uncluttered desk/materials
- use participative goal setting
- teach **self-regulation procedures**
- provide modeling of work
- provide samples of work
- teach making concise checklists
- teach **cognitive mapping**
- use highlighted texts/materials
- draw a picture of new concepts
- teach **Watch Approach**
- use webs, outlines, and diagrams
- teach mapping and webbing
- teach textbook format
- teach **Tree Planning Strategy**

Acquisition

- teach counting strategy
- develop visual strategies for reading
- teach **self-instructional strategy**
- teach visual scanning
- teach memorization techniques
- use graphic displays
- use **phonological rehearsal**
- teach **neurological-impress method**
- use **Concept Mastery Routine**
- develop visual-vocabulary matching
- use **verbal cueing strategy**
- use **interactive teaching**
- use **key word strategy**
- use **choral reading**
- teach skimming of text
- read titles and topic sentences
- use **First-Letter Mnemonics***
- use **semantic feature analysis**
- use **repetitive reading**
- use **end-of-sentence wrap**

** Kansas Learning Strategy (see Selected References)*

Acquisition cont.

- use **cloze reading**
- teach computer assisted reading, writing, math
- use peer note taker
- use math manipulatives/visuals
- use buddy reader
- use taped materials
- develop word predicting techniques
- use word recognition skills for spelling
- use **sound and symbol correlation**
- teach word processing skills
- teach **syllable types**
- teach matching of symbols with words
- teach spelling through singing
- teach **cursive ghost writing**
- teach **Fernald approach**
- use first and last sentences in a paragraph for comprehension
- use speech synthesis technology
- use **whole-word strategy**
- use a ruler to pace print reading
- use multi-media technology
- use **language experience**
- teach language proofing skills
- use **literature circles programming**
- use codes
- use visual or auditory rhymes
- use **the sentence approach**
- use the who/what/where/when/why questioning techniques
- use anagram-type games

Retrieval

- develop mnemonic devices
- relate new to familiar items
- use guided reading
- discuss comprehension questions
- use **Paired Associates Strategy***
- lists steps for assignment
- use **graphic organizers**
- teach **STAD Cooperative Learning**
- teach test, practice and retest techniques
- teach **3M's practice**
- teach **Test-Taking technique***
- use **advance organizers**
- use peer-mediated instruction
- use hints and cues
- use imaging
- use coding
- teach spelling and reading at the same time
- review and summarize frequently
- repeat instructions
- use the **Link System***
- use the **"if/then" strategy**
- use **Given-New Principle Strategy**
- teach **RIDER visual strategy**
- use **class-wide peer tutoring**

** Kansas Learning Strategy (see Selected References)*

Expression

- use dialogue journals
- chart fluency
- use story planners
- use computer, dictionary, or thesaurus
- use oral interviews
- verbalize letter formations
- use speech synthesis technology
- use **inventive spelling**
- teach to edit own written material
- use story retelling
- use maps, webs, and outlines
- use computer spell check
- use computer grammar check
- use graph paper for projects
- compose character sketches
- use art, illustrations, and graphics for projects
- teach **Error Monitoring Strategy***
- teach **Sentence Writing Strategy***
- teach **Paragraph Writing Strategy***

Manipulation

- use **generalization cards**
- use analogies
- practice predicting outcomes
- use problem-solving strategies
- highlight most important words
- simplify the problem
- use **self-directed questioning strategy**
- use **Modified Reciprocal Teaching**
- use **RAM self-questioning**
- use self-evaluation
- use **token reinforcement**
- use **hypothesizing strategy**
- use **self-directed summarization**
- use **reciprocal peer revision strategy**
- use **POSSE strategy***
- use classification system
- formulate summaries
- set up problems in advance
- make generalizations to new learning
- use proofreading skills
- use **miscue analysis**
- develop **concept diagrams**
- use paraphrasing
- teach self-monitoring of homework
- use **"fix-up" reading strategy**
- sum up key points
- summarize information for note taking

**Kansas Learning Strategy (see Selected References)*

Adaptations Teachers Can Make for Students

(Note: Items in bold faced type are available in published form. For further information, contact educational publishing companies.)

Storage

- provide frequent review or repetitions
- provide cumulative reviews
- provide redirection to task
- provide supplementary instruction
- provide prompting with clues or hints
- connect new information to prior knowledge
- limit choices to two to three multiple choice answers
- provide framework for discussion lectures
- use multidisciplinary presentations
- allow reading of tests aloud
- allow verbalizations during tests

Organization

- provide **graphic organizers**
- post assignments in classroom
- write concise, clear directions
- ask probing questions
- set a daily routine
- color code folders, overheads, and handouts
- use **organizational systems**
- provide check-off sheets for activities
- post a materials list in classroom
- use small, sequential steps
- write clearly
- reduce visual distractions
- use study guides
- modify formats
- use **advance organizers**
- provide abundant models or samples
- provide interim dates for long-term assignments

Acquisition

- provide parallel alternative curricula or texts
- use set routines
- differentiate assignments for students
- provide intermittent tutoring
- provide both oral and written directions
- show a model of expected end product
- allow a finger counting strategy
- provide a copy of lecture notes
- use visualization with verbalizations
- label objects
- allow use of calculator or math grid during instruction or testing
- provide frequent breaks
- use modeling frequently
- provide print outline of videos
- ask focused questions
- highlight texts or study guides
- allow use of a designated note taker
- use multi-modality materials
- use visual imagery
- use large print
- talk through how to form letters
- use **cooperative learning**
- allow computer assisted reading, math, and language

Retrieval

- allow use of calculator or math grid
- allow double time for testing
- provide repetition
- use oral interviews
- alert student to change in math operations
- write alternative tests for easy retrieval
- provide word banks with tests
- allow use of scribe
- use visuals and demonstration of oral presentations
- provide oral tests
- provide extended time for responses
- give cues
- provide time frames for assignments
- have student repeat directions
- ask graduated questions (simple to complex)
- eliminate timed tests
- decrease the type or amount of homework

Expression

- allow student to write on the test
- allow student to tape record answers
- allow open book tests
- double space tests
- use oral interviews
- provide training in story elements
- coach letter formation
- use collaborative practice
- decrease amount or type of homework
- allow special pens, paper, and pencils for written work
- eliminate bubble answer sheets
- allow use of calculator
- allow use of notes or cards
- review correct answers
- align test responses vertically
- emphasize written legibility
- allow writing on every other line
- accept computer-generated projects
- allow a scribe to write for a student
- shorten assignments by focusing on key concepts only

Manipulation

- review correction of answers (feedback)
- individualize instruction
- group students by cross-ability
- use **K-W-L strategy**
- correct homework together
- provide feedback on homework
- use **guided practice**
- help students form mental pictures
- use problem integration
- define length of desired response (3-5 sentences)

Following is a list of references for the teaching strategies or adaptations bolded on the previous pages.

Teaching strategies and adaptations are in the order of listing.

Note: Class Project refers to a 1994 Mounds View Learning and Studying Project. This project was authored by Thomas Kitto, coordinator, Mounds View Public Schools. This project is being updated and will be available from Minnesota Educational Services (phone 1-800-652-9024) when completed.

Teaching Strategies

SQ3R: Class Project, strategy #2

Multipass: Kansas Learning Strategy

instructional scaffolding: Tharp, G. & Gallimore, R. (1988). *Rousing Minds to Life: Teaching Learning and Schooling in Social Context*. Cambridge: Cambridge University Press.

Cornell Method: Class Project, strategy #1

Visual Imagery Strategy: Kansas Learning Strategy

elaborative interrogation: Scruggs, T., Mastropieri, M., Sullivan, G., Hesser, L. (1993). Improving reasoning and recall: the differential effects of elaborative interrogation and mnemonic elaboration. *Learning Disabilities Quarterly*, 16 (3), 233-240).

semantic mapping: Class Project, strategy #3

Self regulation procedures: Wood, E, Woloshyn, V., & Willoughby, T. (1995). *Cognitive Strategy Instruction for Middle and High Schools*. Cambridge, MA: Brookline Books.

cognitive mapping: Class Project, strategy #2

Watch Approach: Class Project, strategy #13

TREE planning strategy: Tidal, G. & Hasbrouch, J. (1991) Analyzing student writing to develop instructional strategies, *Learning Disabilities Research and Practice*, 6 (4), 237-245).

Self-instructional strategy: Pressley, M. & Woloshyn, V. (1995). *Cognitive Strategy Instruction*. Cambridge, MA: Brookline Books.

phonological rehearsal: Pressley, M. & Woloshyn, V. (1995). *Cognitive Strategy Instruction*. Cambridge, MA: Brookline Books.

Neurological-impress method: Heckelman, R.G. (1966). *Solutions to Reading Problems*. Ann Arbor, MI: Academic Therapy Publications.

Concept Mastery Routine: Wood, E, Woloshyn, V., & Willoughby, T. (I995). *Cognitive Strategy Instruction for Middle and High Schools*. Cambridge, MA: Brookline Books.

Cloze: Harwell, J. (1989). *Complete Learning Disabilities Handbook*. West Nyack, N.Y.: The Center for Applied Research.

verbal cueing: Bender, W. (1995). *Learning Disabilities Characteristics, Identification, and Teaching Strategies*. Needham Heights, MA: Allyn & Bacon.

interactive teaching: Wood, E, Woloshyn, V., & Willoughby, T. (1995) *Cognitive Strategy Instruction for Middle and High Schools*. Cambridge, MA: Brookline Books.

Key word strategy: Class Project, strategy #6

Choral Reading: McCracken, R.& McCracken, M. (I 990). *McCracken's Survival Handbook: Teaching Reading Through Literature in the Intermediate Grades*. Surrey, B.C.: McCracken Educational Services, Inc.

First-Letter Mnemonics: Kansas Learning Strategy

semantic feature analysis: Heimlick, J. & Pittleman, S. (1986). *Semantic Mapping: Classroom Application*. International Reading Association. Newark, DE.

Repetitive reading: Pressley, M. & Woloshyn, V. (1995). *Cognitive Strategy Instruction*. Cambridge, Brookline Books.

End-of-sentence wrap: McCracken, R. & McCracken, M. (1990). *McCracken's Survival Handbook: Teaching Reading Through Literature in the Intermediate Grades.* Surrey, B.C.: McCracken Educational Services, Inc.

Whole word strategy: Beck, I.L. (1981). Reading problems and instructional practices. *Reading Research: Advances in Theory and Practice*, 2, 53-95. NY: Academic Press.

Literature circles: Kayffnab, G., & Short, K.G. (1990). Teachers and students as desision makers: creating a classrrom for authors. In *Portraits of Whole Language Classroom Learning for All Ages*, 107-132, Portsmouth, NH: Heineman.

syllable principle: Pavlak, S. (1985) *Classroom Activities for Correcting Specific Reading Problems*. West Nyack, N.Y.: Parker Publishing.

cursive ghost writing: Arena, J. (1982). *Diagnostic Spelling Potential Test Manual*. Novato, CA: Academic Therapy Publications.

Fernald approach: Arena, J. (1982). *Diagnostic Spelling Potential Test Manual*. Novato, CA: Academic Therapy Publications.

Language Experience: Heller, M.F. (1988). Comprehending and composing through language experience. *The Reading Teacher*, 42, 130-135.

Sound/Symbol: Arena, J. (1982). *Diagnostic Spelling Potential Test Manual.* Novato, CA: Academic Therapy Publications.

Sentence Approach: Arena, J. (1982). *Diagnostic Spelling Potential Test Manual.* Novato. CA: Academic Therapy Publications.
Paired Associates strategy: Kansas Learning Strategy
Graphic organizers: Class Project, strategies: #7a, 7b, 7c
STAD Cooperative Learning: Class Project: strategy #16
3M's practice: Class Project #4
Test Taking technique: Kansas Learning strategy
Advance organizers: Bender, W. (1995). *Learning Disabilities Characteristics, Identification, and Teaching Strategies*. Needham Heights, MA: Allyn & Bacon.
LINK system: Kansas Learning Strategy
If/Then strategy: Pressley, M. & Woloshyn, V. (1995). *Cognitive Strategy Instruction.* Cambridge, MA: Brookline Books.
Given New Principle strategy: Tidle, G. & Hasbrouch, J. (1991). Analyzing student writing to develop instructional strategies. *Learning Disabilities Research and Practice*, 6 (4), 237-245.
RIDER visual strategy: Bender, W. (1995) . *Learning Disabilities Characteristics, Identification, and Teaching Strategies*. Needham Heights, MA: Allyn & Bacon. 275.
class wide peer tutoring: Annotated bibliography
inventive spelling: Richek, M., Caldwell, J., & Lerner, J. (1996). *Reading Problems: Assessment and Teaching Strategies.* Needham Heights, MA: Allyn & Bacon.
Error Monitoring, Sentence Writing and Paragraph Writing Strategies: Kansas Learning Strategy
generalization cards: Arena, J. (1982). *Diagnostic Spelling Potential Test Manual.* Novato, CA: Academic Therapy Publications.
self-directed questioning strategy: Pressley, M. & Woloshyn, V. (1995). *Cognitive Strategy Instruction*. Cambridge, MA: Brookline Books.
Modified reciprocal teaching: Class Project, strategy # 17
Ram self-questioning: Class Project, strategy #11
Token reinforcement: Hammeken, P. (1995). 450 *Srategies for Success*. Minnetonka, MN: Peytral Publications.
Hypothesizing strategy: Pressley, M. & Woloshyn, V. (1995). *Cognitive Strategy Instruction*. Cambridge, MA: Brookline Books.
Self-directed summarization: Wood, E, Woloshyn, V., & Willoughby, T. (1995) *Cognitive Strategy Instruction for Middle and High Schools*. Cambridge, MA: Brookline Books.

reciprocal peer revision strategy: Ellis, E. (1993) Teaching strategy sameness using integrated form, *Journal of Learning Disabilities* 26 (7), 448.
POSSE strategy: Kansas Learning Strategy
miscue analysis: Lerner, J. (1997). *Learning Disabilities Theories, Diagnosis, and Teaching Strategies*. (7th ed.). Boston: Houghton Mifflin Company.
Concepts: Class Project #21.
Fix-up reading (error analysis) strategy: Bender, W. (l995). *Learning Disabilities Characteristics, Identification, and Teaching Strategies*. Needham Heights, MA: Allyn & Bacon.

Adaptations

graphic organizers: Class Project, strategies #7a, 7b, 7c
organizational systems: Class Project, strategy #20
advance organizers: Bender, W. (1995) . *Learning Disabilities Characteristics, Identification, and Teaching Strategies*. Needham Heights, NM: Allyn & Bacon.
cooperative learning: Scheid, K. (1993). *Helping Students Become Strategic Learners*. Cambridge, NM: Brookline Books.
K-W-L strategy: Caff, E. & Ogle, D. (1987). K-W-L plus: A strategy for comprehension and summarization. *Journal of Reading*, 626-631.
guided practice: Mooney, M. (1995). Guided reading, the reader in control. *Teaching Pre K-8*, 25 (5), 54.

Young Students and SLD

For the purposes of this manual it is important to define the term "young students." This section confines itself to those children who are, or are about to, make the transition from an ECSE program to an elementary school special education program and who:

- Have either an ECSE (Developmental Delay) or a specific learning disability (SLD) label.

  (*Note:* This population of students is very small since many ECSE students have a different primary categorical label such as MMI, Sp/Lang, OHI, etc.)

- Are already in an elementary setting and are referred for an initial assessment (K-3).

Early Identification

There are contradictions in the views of prominent researchers on the identification of SLD in young students. Since the definition states that and SLD is intrinsic to the individual, it is difficult to assess especially in young students (Beers and Beers, 1980). For example, a student who is unable to demonstrate behavior or perform tasks according to grade-level expectations may simply be a developmentally young student in need of a different general education placement (Senior, 1986).

There are also difficulties with early identification, assessment, planning, and intervention for preschool students who demonstrate specific developmental delays or deficit patterns that are early manifestations of SLD. These manifestations include:

- Individual behavior patterns that may adversely affect later academic learning, and which may result in variability in rates and patterns of maturation influencing skill development in academic areas (NJCLD Position paper, 1985).
- Some disorders in attention, memory, perceptual and perceptual-motor skills, thinking, and language may be prerequisite to the acquisition of academic skills in young students, but a causal link is not yet firmly established. Complicating the difficulties with early identification is that most states prohibit the use of the learning disabilities category for preschool students, contrary to the position taken by many professional and advocacy groups in the field of SLD who are supportive of early identification and intervention (Snyder, Bailey, & Auer, 1994).

- At the moment, early diagnosis and early intervention are the exception rather than the rule. Most young students with SLD don't get help until they're well along in school–usually between the ages of 9 and 14 (Wingert and Kantrowitz, 1997, p. 63).

- As young students grow, they develop a complicated collection of learning processes. The failure of a specific process can cause a deficit in the student's ability to acquire knowledge (Riley, 1992).

Implications for Reading

- Current brain research indicates that early intervention with young children is critical because, "If we do not identify children early, by the end of second grade, the majority of them will have difficulty reading for the rest of their lives. What we're finding is that there are sensitive periods when children can learn to read more easily, just like there are windows when children can learn foreign language easily (Wingert & Kantrowitz, 1997)."

- More specifically, reading disabilities have a terribly negative impact on a young student's educational development, motivation for learning, self-esteem, and occupational and vocational success (Cannon, 1997).

- It is possible to identify young students at risk for reading difficulties before they begin learning to read and to provide them with phonological-processing interventions developed to increase their phonological-processing abilities (Hurford, Johnson, et al., 1994). Specific learning disabilities do not go away. Reading disabilities may result from neurological deficits and are not developmental delays (cited in Cannon, 1997).

- Studies show:
  - There are different types of visual deficits in young students with reading disabilities.
  - Young students with dyslexia often have both phonological and visuospatial problems (Eden, Stein, Wood, and Wood,1995).

- Three subtypes of specific reading disabilities are:
  - Difficulty with symbolic processing and memory (i.e., difficulty in repeating numbers, decoding nonsense words, and spelling).
  - Problems with visual processing.
  - Severe deficiencies in reading achievement with a deficit in rapid automatized naming (Watson and Willows, 1995).

Possible Causes of SLD

Possible causes of SLD include:

- Genetic and chromosomal variations.
- Chemical or physical trauma in utero, prenatal, and postnatal infections.
- Birth trauma.
- Teratogens (toxins).
- Sensory impairments.
- Delayed maturation of the central nervous system.
- Neurological impairments.
- Physical impairments.
  (McCarthy, 1989; SLD Companion Manual, 1992)

Possible signs of dyslexia include:

- Having a parent with dyslexia (which greatly increases the chances of both boys and girls having dyslexia).
- Brain differences (some have been found in autopsy studies in students with and without dyslexia).
- Chromosomes 6 and 15 linkage for transmission of dyslexia (Cannon, 1997).
- Common neuropsychological phenotype for: phonological coding deficits (Rumsey, 1992).

Possible causes of learning disabilities affecting mathematics include:

- Early damage or dysfunction in either hemisphere that can disrupt a student's learning of mathematical computation skills.
- Right-hemisphere damage which most affects the integrative, complex, and novel dimensions of early mathematical learning.

After considering the existing medical, behavioral, and historical data on a young student, a team must use their collective expertise to make a judgment about whether or not to pursue an assessment for a suspected SLD.

Background Information

It is essential to understand the similarities and differences in eligibility criteria in order to effectively transition young students from Early Childhood Special Education (ECSE) to elementary school settings and to SLD eligibility.

Similarities and Differences Between ECSE and SLD Criteria

Similarities ***Differences***

Including, but not limited to the following requirements:	**ECSE** (Developmental Delay)	**SLD***
• systematic observation • team assessment • observation of processing • corroborating evidence • whole child approach • data must include parental input • administration of assessment tests by appropriately licensed staff • presenting problem(s) must occur in a variety of settings • full scale or composite scores required (subtest scores not allowed) • neither criteria identifies required assessment tools, but assessment tools must be technically adequate, age appropriate, and individually administered (for SLD, tests must also be standardized for discrepancy calculation)	*No exclusionary factors:* May qualify for any of the 13 special education categories or the ECSE category	*Exclusionary factors:* Eligibility in other categorical areas may exclude student from SLD eligibility*
	Birth through age 7	Age 3 through 21
	Standard Deviation: requirement varies by age	*Standard Deviation:* -1.75 standard deviations of the mean of the difference scores for ability and achievement; regression table required.
	Assessment: Assessment in two or more of the following areas: • cognitive (pre-academic) • motor • communication • adaptive • social/emotional • an additional condition known to hinder normal development (see ESCE Criteria)	*Assessment in all three components:* • severe underachievement • ability/achievement discrepancy in one of seven areas: - basic reading skills - reading comprehension - mathematical calculation - mathematical reasoning - written expression - oral expression - listening comprehension • information processing condition
	Must hinder: normal development in the natural environment	*Must hinder:* rate of learning in regular classroom environment

* **Exclusionary factors:** The team must ensure that the student's underachievement is not primarily the result of vision, hearing, or motor impairment; mental impairment; emotional or behavioral disorders; environmental, cultural, or economic influences; or a history of an inconsistent educational program. IDEA '97 indicates that lack of instruction in reading or math, or LEP may not be the primary cause for severe underachievement in SLD.

Team Review of Existing Data

The transition of young students between ECSE and elementary school sites should occur with as little disruption as possible. The process should be individualized according to the needs of the student, family, and team members. The transition process should ensure that:

- Team members have adequate information about the young student (if possible, by the beginning of the school year), so they feel confident about providing services to the student.
- Parents are required participants in the transition process.
- Teams are involved in the transition process–this may include members from ECSE, SLD, Early Childhood and Family Education (ECFE), or community preschool staff, kindergarten staff, and parents.
- Teams determine calendar timelines that allow for appropriate planning, assessment, and IEP development.

Under IDEA '97, ECSE programming may be provided for young students who meet ECSE (Developmental Delay) criteria until age 7 (by September 1). Students may continue under this label for the entire school year if they are not age 7 by September 1. There is no need to assess young students for SLD if the individual family service plan (IFSP) can still be met through the ECSE program in the elementary setting. For example, ECSE staff may consult at the elementary school while continuing the student on an IFSP. Special education services may be delivered by an SLD teacher.

Givens

- Young students exiting an ECSE program will not need two prereferral interventions. Prereferral interventions are only required for new referrals of young students for assessment of a suspected SLD.
- When a student is transitioning from an ECSE program with an ECSE or Developmental Delay label, all three SLD criteria must be assessed to determine whether or not the student has a specific learning disability. This assessment is considered an initial assessment; students *must* meet initial SLD eligibility criteria. Due process requirements are the same as those for reassessment. (There will be further guidance on procedures from the Minnesota Department of Children, Families & Learning.)
- To determine SLD eligibility, assessment of intellectual ability, academic achievement, and information processing must be conducted.

- The ECSE eligibility assessment may have included the assessment of developmental levels in the following skill areas: cognitive (pre-academic), social, motor, adaptive, and communication. Some of this information may be useful in the assessment process for SLD.
- Teams need to include members who are knowledgeable about ECSE and SLD.

Transition Checklist

The following checklist may assist teams in determining the young student's needs.

- ❑ Review ECSE assessment data and Assessment Summary Report (ASR).
- ❑ Review medical history (include information from non-school service providers), developmental history, and social history.
- ❑ Review student's present level of educational performance and progress over time in the ECSE program.
- ❑ Complete the checklist of characteristics of SLD (Appendix A), Pre-referral Interview (Appendix B) or Home and Family Interview (Black Line Masters).
- ❑ Determine whether the young student will receive services under the ECSE program, will be assessed for a suspected specific learning disability, or will be exited from special education services. If the young student is exited from special education, support services may be provided from general education (Section 504 plan, preferential seating, Title I, etc.)

Assessment of Young Students

Cautions in Assessment of Young Students

The assessment of young students is complicated by factors related to the nature and development of the young student. Most of the caveats expressed in the literature are about assessing and diagnosing preschool students. Keep in mind that this section of the manual focuses on students who are approximately kindergarten age or older and who are moving to elementary settings.

- There are specific problems in reaching definitive conclusions when assessing young students. There should be a cautious interpretation of the scores resulting from standardized tests of intellectual ability and academic achievement for students under age 5. Careful analysis of test norming information is critical, and consulting technical manuals is imperative.

- Consideration of maturation and development through an observation of the student's behavior in typical settings (home, school, and community) must be a part of the process. An observation must be made by professional staff who are knowledgeable and experienced not only in early childhood development but also in the use of anecdotal records, behavior rating scales, and functional assessment.

- Particular attention should be paid to the student's developmental history, including appropriate medical information such as birth trauma, low birth weight, lack of oxygen, etc. Present levels of performance in the areas of speech and language development, motor skills, social competence, conceptual development, and abstract reasoning abilities should also be evaluated.

- Manifestations of SLD in young students are different. "Various manifestations of learning disabilities may be seen in the same student at different ages and as a result of learning demands ... Learning disabilities frequently are manifested as specific deficits in language and speech development, reasoning abilities, and other behaviors requisite to early academic achievement ... Normal development is characterized by broad ranges of individual and group differences, as well as by variability in rates and patterns of maturation (NJCLD, a position paper, 1985)."

During the preschool years, this variability is greater than at school age. For some young students, marked discrepancies in abilities are temporary and are resolved during the course of development or within the context of experiential interaction. For other young students, there is a persistence of marked discrepancies within and among one or more domains of functioning, necessitating the student's referral for special education assessment.

SLD Eligibility for Young Students

Eligibility is determined based on the three SLD criteria components: severe underachievement, severe discrepancy between ability and achievement, and information processing condition.

During the assessment, information must be obtained in order to develop an appropriate Individual Education Program (IEP) based on the young student's strengths and special education needs. Information may be used to determine other categorical eligibility or to exit a student from special education. When assessing young students, it is important to use multiple data sources and methods. Following is a discussion of issues specific to the assessment of young students in the three criteria components of severe underachievement, severe discrepancy, and information processing.

Setting the Stage for Assessment

During the assessment process, it is important to be mindful of the following characteristics of young students that may affect the validity of scores on testing instruments and procedures. Young students:

- Are sensitive to their surroundings and therefore may be easily distracted.
- Are influenced by their comfort level with the assessor.
- Should be assessed in a variety of situations.
- May have rapid developmental change.
- May have a limited interest in being assessed.
- Are tied more closely to neuro-biological development than are older students.
- Have limited communication skills that may interfere with their understanding and/or responses.
- May be distractible and have a short attention span that could affect their responses.
- May have separation issues with parents, making assessment difficult.
- May be noncompliant or have poor understanding of social relationships that may affect performance (McLean, Bailey, and Wolery, 1996).

As suggested, a comprehensive assessment is essential for the identification of SLD in young students, just as it is for older students. When reviewing tests prior to selection for use, it is essential to inspect the test manual regarding norming group information, available scores, reliability and validity of data, and the use and interpretation of the scores (Salvia & Ysseldyke, 1988).

Young Students and Severe Underachievement

Severe underachievement is demonstrated when a young student is unable to learn in response to usual classroom instruction. The determination of severe underachievement must be related to the general education curriculum and useful for writing goals and objectives. When assessing young students in this area, the following assessment documentation must be included.

- parent information (may be gathered through the Home and Family Interview (see Section 4: Severe Underachievement)
- observation (classroom, play-based, etc.)
- evidence of low achievement from sources such as:
  - classroom samples
  - performance-based measures
  - review of existing data
  - group achievement tests
  - Title I and other general education compensatory programs
  - standardized and informal tests

Selected Instruments

The following instruments may be used in assessing severe underachievement in young students. The list is not exhaustive, but is representative of instruments in common use in Minnesota. (See Early Childhood Assessment Manual for others.)

Kaufman 3: Survey of Early Academic and Language Skills (K-SEALS) *(American Guidance Service)*

Brigance Diagnostic Inventories *(Curriculum Associates, Inc.)*

Test of Early Written Language (TEWL) *(PRO-ED, INC.)*

Test of Early Mathematics Ability (TEMA-2) *(PRO-ED, INC.)*

Test of Early Reading Ability (TERA-2) *(PRO-ED, INC.)*

Inventory of Early Math Skills
Inventory of Early Reading Skills
Inventory of Early Writing Skills
Inventory of Concepts About Print
} *(see Appendix A)*

Test of Early Language Development (TELD-2) *(PRO-ED, INC.)*

Clinical Evaluation of Language Fundamentals (CELF - Preschool) *(Psychological Corporation)*

Assessment, Evaluation, and Programming System *(AEPS) (Paul H. Brookes Publishing Co., Inc.)*

Carolina Curriculum for Preschool *(Paul H. Brookes Publishing Co., Inc.)*

Preschool Language Scale III *(Psychological Corporation)*

Hawaii Early Learning Profile (HELP) *(VORT CORPORATION)*

Phonological Awareness

Severe underachievement for young students may be demonstrated by difficulty in phonological awareness. Research indicates that elements of phonological awareness are most likely to predict the success and failure of acquiring early reading skills. Phonological awareness includes discrimination of beginning or ending sounds, rhyming, syllable counting, automaticity, and rapid naming of letters.

The three greatest predictors of reading failure by grade three are trouble with:

- phonological awareness
- rapid naming (in general)
- verbal working memory (short-term memory)

The team needs to determine if these predictors are present in a young student and ask the following questions:

- What components of the evaluation measure these three areas?
- What do the results indicate?

In rare cases, if there is a strong indication of the presence of these predictors, this information may provide the basis for an override (see Section 3: Assessment Process.).

Measures of phonological awareness:

- *Lindamood Auditory Conceptualization Test* (Riverside Publishing)
- *Test of Auditory Analysis Skills* (Academic Therapy)
- *Test of Phonological Awareness* (PRO-ED)

Phonological Awareness Markers

- Three indicators in kindergarten help to predict disabled readers in third grade.
  - speed of naming letters
  - discriminating and manipulating sound in sequence
  - discriminating sounds at beginning of words
- Some studies suggest that early identification should lead to direct teaching of phonological awareness skills, encoding and decoding instruction as an effective intervention model for many at-risk students (Felton, 1992).
- Young students with moderate to severe phonologic impairment in their preschool years are at risk for later deficiencies in phonological awareness and letter knowledge: the two best predictors of reading success.

Young students with:

- Syntactic and/or semantic impairments are at higher risk than those with phonologic impairments.
- Phonologic impairments have significantly more trouble on a letter identification task.

◆ Verbal working memory is the best predictor of ability to identify letters for young students (Webster, Plante, & Couvillion, 1997).

Phonological Awareness Training

Phonological awareness training is explicit training designed to develop an awareness of speech sounds in words. Some examples are rhyming, segmenting words into beginning, middle and ending sounds, and blending sounds to make words.

Phonological awareness training is most effective when combined with direct instruction that teaches young students the connections between the sounds of language and the letters representing those sounds.

Young Students and Severe Discrepancy

Severe discrepancy between general intellectual ability and achievement must be identified in one of the following areas using individually administered, standardized instruments.

- basic reading skills
- reading comprehension
- mathematical calculation
- mathematical reasoning
- written expression
- oral expression
- listening comprehension

Assessment documentation must include:

- Information from parents.
- Standardized achievement testing.
- Standardized intellectual ability testing.
- Verification of scores through performance-based assessment or other measures and observation.
- Use of the Minnesota Regression Table.

Recommended Instruments for Intellectual Ability and Achievement

Recommended Ability Instruments

The following instruments are recommended by the SLD assessment committee for use with the Minnesota Regression Table because they are broad measures of general intellectual ability and are normed across a wide age range of subjects. When making discrepancy calculations, use only the Full Scale IQ score or Broad Cognitive Ability score from the following instruments.

Differential Abilities Scale (DAS) *(*
Psychological Corporation)

Kaufman-Assessment Battery for Children (K-ABC)
(American Guidance Services)

Stanford Binet IV (using conversion chart—see following paragraph)
(Riverside Publishing Company)

Wechsler Intelligence Scales for Children III (WISC III)
Wechsler Pre-School and Primary Scale III (WPPSI-III)
(Psychological Corporation)

Woodcock-Johnson-Revised, Tests of Cognitive Ability (WJ-R)
(Riverside Publishing)

When determining the most appropriate assessment instrument for a student, refer to the norming information in the technical manual for that specific instrument and to the *Standards for Educational and Psychological Tests* (American Psychological Association), 1995, to ensure the test is normed for a population with characteristics similar to those of the student in question. If the assessor uses the *Stanford Binet*, the conversion chart found in Appendix C must be used. Conversion of scores is necessary because the *Stanford Binet* has a standard deviation of ±16, not ±15 for which the Minnesota Regression Table is designed.

Cultural Language Differences

For students with cultural and/or language differences and for whom a traditional intellectual ability measure may not be valid, it is recommended to use the assessment practices suggested in Section 7: Reducing Bias and in *Reducing Bias in Special Education Assessment for American Indian and African American Students*, MCDFL, 1998. A listing of nonverbal assessment instruments may be found in Section 7: Reducing Bias, as well as other resources.

Cautions in Intellectual Ability Measures With Young Students

"Generally, whereas IQs obtained prior to 5 years of age must be interpreted cautiously, IQs tend to remain relatively stable from kindergarten on ... The IQ of any given child may change as much as 20 points, but for most children measured intelligence remains relatively stable after 5 years of age ... In spite of high test-retest correlation in assessing individuals it is necessary to conduct frequent and periodic testing if test scores are to be used for guidance or placement decisions" (Sattler, 1988).

Much of the constancy of IQ is related to:

- The invariance of genetic factors.
- The relative stability of a particular student's environment.
- Irreversibility (the influence of current developmental status on future development).
- The overlap of abilities measured in testing (Sattler, 1988).

Recommended Achievement Instruments

The following tests are recommended by the Minnesota SLD Assessment Committee because they fit the criteria below:

- whole person or broad picture concept of achievement
- appropriate age ranges in norming samples
- mean standard score of 100, standard deviation of ±15

Reviews of each of these instruments are included in the latest editions of *Assessment in Special Education* (Salvia & Ysseldyke, 1988) Sattler's (1988) *Assessment of Children's Intelligence and Special Abilities*, and in other similar references.

Clinical Evaluation of Language Fundamentals 3 (CELF 3)
(Psychological Corporation) Usually administered by a speech/language pathologist

Standard Scores for:
- Receptive Language (Listening Comprehension)
- Expressive Language (Oral Expression)

Kaufman Test of Educational Achievement, Comprehensive Version (KTEA)
(American Guidance Services, Inc.)

Composite Scores only:
- Mathematics
- Reading

Recommended Achievement Instruments (Cont.)

Oral and Written Language Skills - (OWLS) *(American Guidance Services, Inc.)*
Administered by either a trained SLD teacher or speech/language pathologist

Standard Scores for:
- Oral Expression
- Listening Comprehension

Wechsler Individual Achievement Test (WIAT) *(Psychological Corporation)*

Composite Scores only:
- Reading
- Language
- Mathematics
- Writing

Woodcock-Johnson-Revised, Tests of Achievement (WJ-R) *(Riverside Publishing)*
Standard Scores for:

Broad Clusters	*or*	Basic Skills Clusters	*or*	Applications Clusters
• Broad Reading		• Basic Reading Skills		• Reading Comprehension
• Broad Mathematics		• Basic Math Skills		• Mathematics Reasoning
• Broad Written Language				• Written Expression

Special Caution in Achievement Tests

If a young student receives a raw score of 0 on a recommended standardized achievement test, there typically is a corresponding standard score. If the team questions the validity of the derived standard score, further assessment may be necessary using a supplemental test. The following tests may be used for this purpose. Results are reported as standard scores and have a standard deviation of ±15, and may be used to compute a severe discrepancy.

Supplemental Achievement Tests

Kaufman 3: Survey of Early Academic and Language Skills (K-SEALS)
(Psychological Corporation)

Metropolitan Readiness Tests (for individual administration) *(Psychological Corporation)*

Test of Early Mathematics Ability (TEMA-2) *(PRO-ED, INC.)*

Test of Early Reading Ability (TERA-2) *(PRO-ED, INC.)*

Test of Early Written Language (TEWL) *(PRO-ED, INC.)*

Clinical Evaluation of Language Fundamentals (CELF-Preschool)
(Psychological Corporation)
** for the areas of oral expression and listening comprehension*

Young Students and Information Processing

An information processing condition is manifested by the inability to adequately store, organize, acquire, retrieve, express, or manipulate (SOAR'EM) information in a variety of settings. When assessing young students for information processing, documentation must include:

- Information from parents.
- Data from a variety of settings.
- Data from observations.

In some cases, SOAR'EM components may already have been observed in the young student's ECSE setting. It is not necessary to use a standardized assessment instrument to assess for information processing. Relevant information may be gathered from previous ECSE assessments or from the Checklist of Deficit Patterns for Young Students (Appendix A), Teacher Interview, and the Home and Family Interview (Black Line Masters). Information gleaned from subtests, questionnaires, or checklists may also help to verify an information processing condition.

Eligibility Determination

After a careful review of all available assessment data, the team must make a determination of eligibility.

The young student:

❑. Is found eligible for SLD and in need of special education and related services. Due process procedures must be followed and a new IEP must be written.

❑. Is not found eligible for SLD. The team may explore one or more of the following:

- Support systems available through general education (Title I, ESL, general education paraprofessional, volunteers, eligibility for 504, etc.)
- General education classroom modifications and instructional strategies based on assessment results.
- Suggested interventions, programs, and support for parents.
- Community or interagency resources (occupational therapist, physical therapist, speech language therapy, counseling, tutoring, other evaluation, etc.).

IEP and Placement Determination

Data gathered through the assessment process will provide the teams with information necessary to develop an appropriate IEP. Goals and objectives will be developed to address the young student's learning needs.

The team must identify the nature and type of service(s) needed based on the student's assessed needs. Students may be transitioned from ECSE (Developmental Delay) eligibility to SLD eligibility prior to kindergarten, at the end of kindergarten, or during first grade. Districts may use their resources flexibly when serving young students with SLD.

Using the procedures previously mentioned, teams (including parents) will discuss differences between the ECSE and the elementary setting in expectations, service delivery, and environment. The teams will collaboratively:

- Follow IEP due process procedures.
- Develop goals and objectives for the IEP.
- Determine program options and service providers.
- If possible, determine general education placement early in the spring so that the receiving general education teacher may actively participate in the transition process.
- Determine if any staff development program needs to be offered to the receiving staff and set training timelines.
- If possible, facilitate observation of the young student at the ECSE site by the receiving staff.
- Determine if continuing ECSE programming is appropriate (*Note:* young students may continue under ESCE [Developmental Delay] until age 7).
- Consider all possibilities for provision of direct, indirect, and consultative special education services. (*Note:* The amount of service received in ECSE should not determine the amount of direct service time in the elementary setting.) The young student may have very different needs in elementary school.

Activity Level

Activity level means the level or amount of response to the student's environment. The environment includes physical, auditory, and visual elements.

Both unusually high and unusually low levels of activity are associated in the literature with learning disabilities. Following are behaviors that may be observed in students with high activity levels.

- constant movement
- inability to sit still
- fingering, touching, and mouthing objects
- uninhibited and/or excessive speech
- restlessness
- distractibility
- short attention span
- poor concentration
- excitability
- lack of frustration tolerance
- activity that is not excessive, but is nondirected and inappropriate

Following are behaviors that may be observed in students with low activity levels.

- listlessness
- inattentiveness
- daydreaming
- lethargy

Information concerning the student's activity level may be collected from prereferral interviewer, referral information, review of existing data, standardized tests, informal procedures, and during the observation.

Assessment

Assessment is a process of gathering information for eligibility determination and the identification of specific strengths and weaknesses so that an appropriate instructional program can be planned for a student. Review of existing data, standardized tests, informal procedures, and observations may be used in this process. Under IDEA '97, parents are specifically included as members of the team making assessment decisions.

GLOSSARY

Attention

Attention may be defined as the ability to select relevant stimuli and inhibit or resist responding to competing stimuli. Attention to task is important in all learning situations. Problems with attention in the classroom may be indicated by some of the following behaviors.

Difficulty with:

- Staying on task.
- Beginning, organizing, or completing work.
- Listening.
- Concentrating.
- Making careless errors.
- Being easily distracted.

Auditory Processing *(see Section 6: Information Processing)*

Emotional or Behavioral Disorders (EBD)

Emotional or behavioral disorders are manifested in the inability to relate to peers and adults, attention problems related to excessive preoccupation, thought disorders, depression, excessive aggression, tendencies to develop psychosomatic symptoms, or phobias associated with social/school situations. Many students with specific learning disabilities also exhibit emotional or behavioral problems caused by continuous frustration and failure. The team must determine if emotional or behavioral disorders are the primary cause of the student's underachievement.

The review of existing data may provide guidance in determining if further social or emotional skills need to be assessed. It is extremely important that parent(s) are consulted and interviewed when there are behavioral concerns so they can provide a behavioral or emotional history for the student. The school psychologist, social worker, and EBD teacher may need to be involved in the assessment. Consultation with the EBD teacher will also be helpful and informative. A student with achievement difficulties that are primarily the result of emotional problems does not meet the eligibility criteria for a specific learning disability.

Environmental or Economic Influences *(see Section 8: Exclusionary Factors)*

General Intellectual Ability

General intellectual ability is defined as a student's overall ability to adapt to and function in an environment. General intellectual ability level includes not only the student's cognitive abilities and adaptive behaviors displayed in school, home, and social relationships, but also ability as measured by individually-administered, standardized, intellectual ability tests.

Goals

Goals must be developed and included in each student's Individual Education Program (IEP) based on the student's assessed needs and present levels of educational performance. Goals are global in nature. They should be clearly articulated, related to assessed needs, and accomplished within 12 months. Progress toward these goals must be reported to parents on the same reporting schedule as the rest of the school building.

Each goal includes three components: the skill or behavior to be changed, the direction of change, and the expected annual ending level of performance. Goals should be written after a consideration of past achievement, the student's preferences, the prioritized needs, and the time necessary to achieve the goal.

Individual Education Program (IEP)

Individual Education Program means a written plan for specially designed instruction developed by a team. The program must consist of present levels of educational performance that lead to statements of need. Goals and accompanying objectives are developed based on the student's assessed needs. An IEP is written for 12 months and must be reviewed and revised annually. A periodic review must conducted before the annual IEP review.

Information Processing *(see Section 6: Information Processing)*

In addition to the information presented in Section 6, it is important to define auditory and visual processing. These terms refer to the auditory and visual modalities in information processing.

Auditory processing problems are manifested in the six components of information processing. Auditory processing refers to the differentiation and comprehension of sounds (speech or nonspeech). It may involve differentiating tone, rhythm, volume, or direction of sound. Students who have difficulty with auditory processing may have problems distinguishing the differences between sounds or spoken words. This may result in

problems with learning to comprehend and produce oral language. Auditory processing problems also directly affect a student's ability to read, spell, or write, and may be manifested in a student's ability to store, organize, acquire, retrieve, express, and manipulate.

Visual processing refers to the ability to recognize and interpret the visual world. It includes identifying likenesses and differences, patterns, letter forms, word patterns and gross forms (pictures, geometric patterns, etc.). Visual processing is the interpretation of visual stimuli by the brain and can involve visual discrimination, memory, sequencing, and abstraction (see definition of Information Processing) *(Riley, 1992).* Visual processing problems are manifested in the components of information processing: storage, organizations, acquisition, retrieval, expression, and manipulation. Students who have difficulty with visual discrimination may have problems distinguishing the differences between pictures, objects, shapes, printed letters, and words.

Listening Comprehension

Listening comprehension is the ability to receive and understand oral stimuli. Listening comprehension includes understanding and perceiving phonology, morphology, syntax, semantics, and pragmatics of the language system.

1. *Phonology* relates to the production of the phonemes (speech sounds) of a language.
2. *Morphology* relates to the production of the morphemes (smallest meaningful unit of language) of a language.
3. *Syntax* is the sequence, combination, and function of words in an acceptable spoken structure.
4. *Semantics* is the understanding, use and specific meaning of spoken language.
5. *Pragmatics* is the use of both verbal and nonverbal language in social context.

Students who have difficulties in listening comprehension cannot accurately perceive and interpret oral language.

Mathematical Calculation

Mathematical calculation includes:

- Recognition and understanding of whole numbers, fractions, decimals, and percentages.
- Identification and understanding of mathematical symbols.
- Numeration.
- Place value.
- The computational processes of addition, subtraction, multiplication and division of whole numbers, fractions, decimals, and percentages.

Mathematical Reasoning

Mathematical reasoning is the ability to use decision-making skills in the application of mathematical concepts to real world situations.

Mathematical reasoning includes the ability to:

- Locate information needed to solve a task.
- Determine the appropriate operation(s) needed to solve a problem.
- Consider and select the most feasible strategy for problem-solving.
- Estimate and determine the reasonableness of a solution.
- Find solutions in an appropriate manner.
- Recognize and apply common measurement units.
- Understand and interpret graphs and tables.
- Solve problems involving money, time, shapes, and size.

Medical Factors

Medical factors can result in a student's underachievement. For example, metabolic disorders can produce lethargy, distractibility, and other symptoms found in students with specific learning disabilities. Students with allergies, asthma, chronic ear infections, ear infections producing hearing loss, and respiratory disorders can have their schooling disrupted and lose the continuity of instruction, which may result in a lack of achievement.

Medications for some disorders may affect attention or slow a student's response time. It is important to include a school nurse or other trained individual on the team to interpret medical data.

In some cases, medical problems or concerns are identified as central nervous system dysfunctions affecting intellectual and academic functioning. In these situations it is the role of the team to determine if a student has a learning disability, meets criteria, and is eligible for special education service.

Objectives

Each annual goal has at least two specific objectives. Objectives are based on the steps necessary to achieve the annual goal. There are four components of an objective: the skills to be performed, the conditions and the criteria for evaluation, and evaluation procedures. Objectives assist in identifying the skills taught, the progress made, and the selection of materials and methods most appropriate for the student.

Oral Expression

Oral expression is the ability to produce meaningful speech. Oral expression includes all the components of language: phonology, morphology, syntax, semantics, and pragmatics. (see Listening Comprehension for definition).

Organizational Skills

Organization is the ability to arrange, plan, structure, or categorize information. Organizational skills may be internal or external, and may be applied to ideas, tasks, or objects.

Internal organization is the ability of a student to order and systematically structure ideas. Students with difficulty in internal organization may demon strate problems in the use of time, position, and awareness of space, sequencing events, task preparation, task completion, and anticipation of consequences.

External organization is the ability of a student to give order and structure to the environment. Students with problems in external organization may demonstrate problems in task preparation and completion, returning home work, keeping belongings, and arranging the physical environment.

Phonological Processing *(see Section 12: Young Students)*

Reading

Basic reading skill levels may be assessed through standardized tests, diagnostic reading tests, reading inventories, performance-based measures, or informal assessments. Basic reading skills include the following sight words.

- decoding
- structural analysis
- vocabulary
- fluency

While sight word recognition and decoding skills are the core of basic reading skills, it is important to consider these skills in the context of a written passage.

Reading comprehension skills may be assessed through diagnostic reading test, standardized test, performance-based measures, or information assessment. Reading comprehension is the process of understanding the ideas and meanings contained in written material. This process occurs in both oral and silent reading. Reading comprehension may be literal, inferential, or critical.

Literal comprehension is the understanding of information presented directly in the material read. Literal comprehension includes answering the who, what, when, where, etc. questions based on written content. Locating facts, sequencing events, and identifying ideas presented are elements of literal comprehension.

Inferential comprehension requires interpretation of written material. The student acquires meaning from the material presented. Cause and effect, predicting logical consequences, and comparing and contrasting are tasks requiring inferential comprehension.

Critical analysis requires high level skills in determining the purpose and validity of written material.

Social Skills

Social skills are defined as the ability to recognize and respond to verbal intonations and nonverbal aspects of communication indicating the attitudes, feelings, and intentions of the communicator. Students who have difficulties in this area may display inappropriate classroom and social behavior due to an inability to correctly interpret common expressions, facial affect, and attitudes. Students with poor social skills may also have problems with interpreting boundaries demonstrated through bumping into objects and people, standing too close to others, talking at inappropriate times, crying or laughing inappropriately, and generally misperceiving peer and adult cues. This inappropriate social behavior may result in rejection from others. These types of problem behaviors should not be ignored as they affect the student's ability to cope; gain and maintain friendships; participate in one-to-one small and large group activities; and maintain a healthy self concept. When social skills are an area of need and the present level of educational performance is below that of peers, then appropriate social skills goals and objectives must be written and incorporated into the student's IEP.

Visual Processing *(see Section 6: Information Processing)*

Written Expression

Written expression is the ability to use written language to clearly communicate ideas, thoughts, and feelings. Written expression requires the student to integrate skills and abilities in the areas of listening, speaking, and reading to produce a written product. Written expression is a difficult cognitive function because it uses all modes of learning.

Written expression also requires the use of handwriting and punctuation skills. It includes linguistic skills of morphology, syntax, and semantics used to express thoughts, feelings, and opinions in an organized way.

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Contained in this Section

SLD Criteria Worksheet

Initial Underachievement Checklist

SLD Observation Form

Home and Family Interview

Review of Existing Data Questions for IP

IP Analysis of Student Performance Charts

IP Student Interview

IP Teacher Interview

IP Standardized Test Grid

IP Assessment Interpretation

IP Data Summary

IP Tally Sheet

SLD Diversity Worksheet

SLD Exclusionary Factors Checklist

SLD Eligibility Criteria

Information Processing Profile

SLD Criteria Worksheet

(Based on Minnesota Rule 3525.1341)

Student _____ Grade _____ Birth Date _____

General Education Teacher _____ Date _____

Assessor _____

Directions: Determine eligibility for each of the three components of the SLD criteria by responding to items that are applicable to the student, including the yeslno items. In order for a student to be eligible, all criteria component statements must have a "yes" response.

A. Severe Underachievement	**B. Severe Discrepancy**	**C. Information Processing Condition**
1. The student demonstrates severe underachievement as noted from sources such as: ❑ cumulative record reviews ❑ classwork samples ❑ anecdotal teacher records ❑ formal tests ❑ informal tests ❑ curriculum-based assessment results ❑ results from instructional support programs (i.e., Title I, Graduation Standards, Minnesota Statewide testing, Minnesota Basic Standards Testing, etc.) ❑ other _____ ❑ Yes ❑ No 2. An observation(s) has been completed, which indicates how the student's observed behavior relates to his/her academic functioning. ❑ Yes ❑ No	1. The student demonstrates a discrepancy between general intellectual ability and achievement in one or more of the following areas (-1.75 SD or greater below the mean of the distribution of difference scores): ❑ oral expression ❑ listening comprehension ❑ written expression ❑ basic reading skills ❑ reading comprehension ❑ mathematical calculation ❑ mathematical reasoning ❑ Yes ❑ No 2. The severe discrepancy is verified through observation. ❑ Yes ❑ No	1. The student has an information processing condition in one or more of the following areas: ❑ storage ❑ organization ❑ acquisition ❑ retrieval ❑ expression ❑ manipulation ❑ other _____ ❑ Yes ❑ No 2. The information processing condition occurs in a variety of settings: ❑ school ❑ home ❑ community ❑ work site ❑ Yes ❑ No 3. The student's underachievement is not <u>primarily</u> the result of: Yes No vision impairment ❑ ❑ hearing impairment ❑ ❑ motor impairment ❑ ❑ mental impairment ❑ ❑ emotional or behavioral disorder ❑ ❑ environmental influence ❑ ❑ cultural influence ❑ ❑ economic influence ❑ ❑ history of inconsistent educational program ❑ ❑ IDEA '97 Lack of instruction in reading or math ❑ ❑ LEP ❑ ❑

Initial Underachievement Checklist

In order to establish a pattern of severe underachievement it is necessary to gather data in a review of existing data. Sometimes this information is already recorded on a district prereferral or referral from. If this is not the case, the following form may be used to record information about the student's history of severe underachievement.

Student's Name _____ Grade _____ Birth Date _____

General Education Teacher _____ Date _____

Assessor _____

Assessment of Performance

- ❑ General education teacher's assessment of the student's daily work reveals a relative lack of quality and depth on a consistent basis.
- ❑ Performance-based measures indicate a lack of achievement over time.
- ❑ Records and reporting systems show a pattern of poor achievement.
- ❑ Family members express concern that the student is not achieving to potential. Examples:
- ❑ The student expresses frustration with his or her achievement in academics, comprehension, following directions, completing assignments, building and maintaining friendships, etc.
- ❑ Standardized group and/or individual achievement test results are in the low range of academic achievement.

Group Achievement Test(s)	Stanine	Percentile Ranking	Grade Equivalent

Classroom work

- ❑ The quality and depth of work is below expectations for this student when compared to his or her peers.
- ❑ Classroom work is completed carelessly or too quickly.

Classroom work demonstrates:

❑ poor understanding ❑ superficial knowledge ❑ lack of understanding

SLD Observation Form

(Performed in the context of the general education classroom)

Student's Name _____ Grade ____ Birth Date _____

General Education Teacher _____ Date _____

Assessor _____

Class _____ Student/Teacher Ratio _____

Observer _____ Beginning Time _____ Ending Time _____

Reason(s) for Referral _____

Setting (describe) _____

Task (describe) _____

Check the observed level of the student's functioning. Please use reverse side for more specific comments or relevant dialogue.

Academic Areas	No problem	Some Problem	Significant Problem	Not Observed	Comments
Basic reading skills	❑	❑	❑	❑	
Reading comprehension	❑	❑	❑	❑	
Mathematical calculation	❑	❑	❑	❑	
Mathematical reasoning	❑	❑	❑	❑	
Written expression	❑	❑	❑	❑	
Oral expression	❑	❑	❑	❑	
Listening comprehension	❑	❑	❑	❑	

Behavior	No problem	Some Problem	Significant Problem	Not Observed	Comments
Hyperactive	❑	❑	❑	❑	
Hypoactive	❑	❑	❑	❑	
Impulsive	❑	❑	❑	❑	
Distractible	❑	❑	❑	❑	
Perseverative	❑	❑	❑	❑	
Disruptive	❑	❑	❑	❑	
Uncooperative	❑	❑	❑	❑	
Impaired social interaction	❑	❑	❑	❑	
Overly compliant	❑	❑	❑	❑	
Other relevant behavior	❑	❑	❑	❑	

Information Processing	No problem	Some Problem	Significant Problem	Not Observed	Comments
Follows directions (S)	❑	❑	❑	❑	
Remembers visual material (S)	❑	❑	❑	❑	
Remembers auditory material (S)	❑	❑	❑	❑	
Brings classroom materials (O)	❑	❑	❑	❑	
Begins task promptly (O)	❑	❑	❑	❑	
Completes assignment (O)	❑	❑	❑	❑	
Uses planning skills (O)	❑	❑	❑	❑	
Understands visual material (A)	❑	❑	❑	❑	
Comprehends information (A)	❑	❑	❑	❑	
Recalls information (R)	❑	❑	❑	❑	
Responds in timely manner (R)	❑	❑	❑	❑	
Uses strategies to recall (R)	❑	❑	❑	❑	
Writes legibly (E)	❑	❑	❑	❑	
Participates in class (E)	❑	❑	❑	❑	
Demonstrates fluency in speech (E)	❑	❑	❑	❑	
Applies information (M)	❑	❑	❑	❑	
Makes inferences (M)	❑	❑	❑	❑	
Interprets information (M)	❑	❑	❑	❑	

S = Storage, 0 = Organization, A = Acquisition, R = Retrieval, E = Expression, M = Manipulation of information

Indicate how the observed behavior relates to the student's academic functioning.

Does the general education teacher think the observation period is representative of typical behavior for this student in the classroom? ❑ Yes ❑ No

Other comments and observations:

Home and Family Interview

Dear Family Member,

The purpose of this form is to gather information from parents on your observations about your child and other issues that may affect your child's school performance. The information you provide must be included as part of the assessment for your child. Your ideas and concerns are important to the assessment process and will be summarized in the Assessment Summary Report (ASR). Use additional paper if more room is needed when answering these questions.

Student's Name _____ Grade _____ Birth Date _____

General Education Teacher _____ Date _____

Assessor _____

School _____

Parent(s) _____

Form completed by _____

❑ Mail ❑ Personal interview with: ❑ Phone interview with:

Student lives with	Persons living in the student's home		
❑ Parent(s) ❑ Foster parent ❑ Relative ❑ Peers ❑ On own ❑ Other	Name	Relationship to child	Age
	Family members not present in the home		
	Name	Relationship to child	Age

1. Does your child have any medical, physical or psychological conditions? Please check all that apply even if they are not currently present. For items checked, please provide explanation. Indicate medication if applicable.

	Medication	Explanation
❑ Vision		
❑ Hearing		
❑ Attention Deficit Disorder		
❑ Head Injury		
❑ Asthma		
❑ Allergies		
❑ Diabetes		
❑ Depression		
❑ Cerebral Palsy		
❑ Seizures		
❑ Other		

2. Does anyone in your family have a history of medical or physical problems?
❑ yes ❑ no If yes, please explain:

3. Has anyone in your immediate or extended family had academic or educational problems? ❑ yes ❑ no If yes, please explain:

4. Were there any unusual complications during the pregnancy or birth of this child?
❑ yes ❑ no If yes, please explain:

5. Were the developmental stages such as walking, sitting, etc. for this child within normal ranges? ❑ yes ❑ no If no, please explain:

6. Many learning problems in childhood are temporary and may be brought on by changes in the life of a child and his or her family. Indicate which of the following events have occurred in your family. (Check all that apply.)

Event	Year	Describe
❑ Move to a new home		
❑ Change of school		How many time in the year stated? How many times total?
❑ Repetition of grade		
❑ Serious illness in family		
❑ Death in family		
❑ Divorce/separation of parents		
❑ Change in hours parent(s) are home		
❑ Loss of job		
❑ Parent began work out of home		
❑ Brother or sister left home		
❑ Marriage of brother or sister		
❑ New person joined family		Who?
❑ Neighborhood concerns		
❑ Chemical or alcohol use		When? Ongoing?
❑ Homelessness		
❑ Foster home placement		
❑ Court placement		
❑ Involvement with the law		
❑ Family member in counseling		Ongoing?
❑ Other		

7. What are your child's current school problem(s)?	When did you first notice them?	What do you think caused them?

8. Do you feel your child's school problem(s) is (are) the result of a cultural or other misunderstanding? ❑ yes ❑ no If yes, please explain:

9. Have you tried anything to help your child at home such as reading aloud, sitting with your child at homework time, etc.?

10. How do you think other people (relatives, neighbors) view your child?

11. Has repeating a grade ever been considered for your child?
❑ yes ❑ no If yes, please explain:

12. In your opinion, what can the school staff do to be most helpful to your child at this time?

13. Share the strengths and special abilities of your child.

14. Describe the way you've seen your child learn best. Give an example.

15. Describe something your child has learned easily in the last three months.

16. Describe something your child had difficulty learning in the last three months.

17. What information would you like from this assessment?

18. How many days a week does your child *have* homework? _____

How many days a week does your child *do* homework? _____

How long does he or she spend on homework each day? _____
(minutes or hours)

Does your child complete homework independently, or does your child need your assistance?

19. How would your family life change if your child no longer had the school problem(s)?

20. Rate your child's performance at home or in the community on the following items:	Does very well	Occasionally requires parent assistance	Always requires parent assistance	Not applicable
Follows two- to three-step directions (S)	❑	❑	❑	❑
Remembers (S)	❑	❑	❑	❑
Organizes well (O)	❑	❑	❑	❑
Uses planning skills (O)	❑	❑	❑	❑
Understands what he or she reads (A)	❑	❑	❑	❑
Understands what he or she sees (A)	❑	❑	❑	❑
Understands what he or she hears (A)	❑	❑	❑	❑
Learns a new game (A)	❑	❑	❑	❑
Recalls events from the school day (R)	❑	❑	❑	❑
Recalls specifics from a special event (R)	❑	❑	❑	❑
Reads aloud (R)	❑	❑	❑	❑
Carries on a conversation (E)	❑	❑	❑	❑
Handwrites (E)	❑	❑	❑	❑
Problem solves (M)	❑	❑	❑	❑
Explains something he or she learns (M)	❑	❑	❑	❑
Assembles or repairs things (M)	❑	❑	❑	❑
Demonstrates artistic ability (M)	❑	❑	❑	❑
Knows basic math facts (R)	❑	❑	❑	❑

S = Storage, 0 = Organization, A = Acquisition, R = Retrieval, E = Expression, M = Manipulation of information

Thank you for your input!

Review of Existing Data Questions for IP

Student's Name _____ Grade ____ Birth Date _____

General Education Teacher _____ Date _____

Assessor _____

Pose these questions to the IEP team at the review of existing information meeting. Note the length of time the student has had the problem(s) and the situations in which the problem(s) are reported.

1. How does the student learn? (copying, rehearsing, using fingers, auditory and visually rehearsal, etc.)

2. Is the student's method of learning identified in question #1 used in all subject areas?

3. At what point does the student's method of learning lose its effectiveness?

4. Describe the student's organizational skills.

5. What behavior does the student demonstrate when attempting to recall information?

6. What is the student's response to corrective feedback?

7. How well does the student take tests?

8. Does the student's body language match his or her verbal expression?

9. Does the student express him or herself fluently?

IP Analysis of Student Performance

It is as important to identify an information processing condition or deficit as it is to identify a severe discrepancy and/or severe underachievement when assessing a student for a suspected learning disability. The analysis of student work is an often overlooked source of information. The link between an information processing condition, severe discrepancy in one of the seven areas of eligibility, and severe underachievement can be partially made through this analysis.

Samples of the student's work across time, anecdotal information, documentation of observations, and interviews are useful in establishing this deficit. Analysis of this information may also identify a student's processing strengths, which can then be maximized to help develop student coping strategies and teaching strategies.

Using the Charts *(charts follow on the next six pages)*

- Each information processing component and representative attributes are noted at the top of each page.
- The seven areas of achievement are listed down the left hand side of each chart in the first column.
- The middle column lists some example difficulties a student might experience in each of the seven areas of achievement.
- The third column indicates possible sources of information.
- An IEP team member may add any other pertinent information to this chart that is specific to the building or grade level.

Using samples of a student's work, highlight the examples of possible information problems, i.e., misspellings, issues of spacing and capitalization errors, alignment issues, omissions, and problems in remembering basic facts. Use this highlighted information and the charts to identify the area of information processing represented by these problems.

Chart 1 ***Analysis of Student Performance***

Storage

Memory, Rehearsing, Relating

Directions: Please circle the area of student difficulty and the source of information based on your analysis of the student's work.

Areas of achievement	Student has difficulty with	Sources of information
Basic Reading Skills	Repeating letters/sounds/words Recalling letters/sounds/words	Sound/symbol sheets Guided samples
Reading Comprehension	Reciting facts Identifying significant details Recognizing logical relationships	Worksheets Homework Quizzes
Mathematical Calculation	Recalling numeration skills	Math papers and quizzes
Mathematical Reasoning	Remembering temporal/spatial sequences Remembering mathematical relationships Repeating terminology	Quizzes and math papers
Written Expression	Remembering motor patterns Maintaining vocabulary Remembering grammar rules	Journal writing Compositions Reports
Oral Expression	Imitating sounds and words Remembering words	Rhyming games
Listening Comprehension	Remembering facts and details given orally Recalling meanings of terms spoken	Class discussions

Chart 2

Analysis of Student Performance

Organization

Arrange, Plan, Label

Directions: Please circle the area of student difficulty and the source of information based on your analysis of the student's work.

Area of achievement	Student has difficulty with	Sources of information
Basic Reading Skills	Differentiating between letters/words Labeling and associating sounds with letters/words Sequencing letters/words Reading from left to right	Worksheets Picture cards Listening to oral reading
Reading Comprehension	Finding main topics from facts Organizing facts sequentially, chronologically	Worksheets Notes, mapping, timelines
Mathematical Calculation	Applying concepts of conservation, classification, place values, regrouping Completing problems systematically	Worksheets Applied problems
Mathematical Reasoning	Prioritizing problem-solving steps Sequencing numbers Associating coins with money value Demonstrating sense of time	Worksheets Counting change Board work
Written Expression	Spacing problems on page Writing from left to right Writing letters in correct order to make words Writing words into meaningful sentences Supporting main idea in a paragraph Sequencing paragraphs Taking meaningful notes	Math papers Notes Journal Daily oral language samples Compositions
Oral Expression	Retrieving needed words Sequencing meaningful sentences	Observations Class discussions
Listening Comprehension	Discriminating between likenesses and differences Integrating current information with past experience Following oral directions Associating meaning with spoken words Taking meaningful notes from lecture presentations	Worksheets presented orally Spelling bees Observations

Chart 3

Analysis of Student Performance

Acquisition

Receive, Link, Gain, Comprehend

Directions: Please circle the area of student difficulty and the source of information based on your analysis of the student's work.

Area of achievement	Student has difficulty with	Sources of information
Basic Reading Skills	Focusing on print Tracking as reading Learning the alphabet Discriminating between sounds, letters, words Developing vocabulary	Observe reading fluency Alphabet song Rhyming games Vocabulary cards
Reading Comprehension	Absorbing information from reading Perceiving literal meaning Identifying significant details	Class questions and answers Worksheets Guided reading practice
Mathematical Calculation	Recognizing numeration skills (counting, adding, subtracting, multiplying, etc.) Reading numerals/symbols	Worksheets Oral math work Math games
Mathematical Reasoning	Perceiving temporal/spatial sequences Reasoning Judging	Tells time Problem worksheets Oral responses in class
Written Expression	Tracing and copying forms from paper, text, board, etc.	Worksheets Board work Notes
Oral Expression	Talking	Speeches Show and tell
Listening Comprehension	Paying attention Discriminating likenesses and differences in oral language Adequately understanding language	Answers questions appropriately Observations

Chart 4

Analysis of Student Performance

Retrieval

Locate, Recognize, Search

Directions: Please circle the area of student difficulty and the source of information based on your analysis of the student's work.

Area of achievement	Student has difficulty with	Sources of information
Basic Reading Skills	Labeling letters Recognizing whole words Decoding words in isolation/ text with fluency Skimming	Oral reading Word searches
Reading Comprehension	Identifying significant details Locating	Cloze activity Fill in the blanks Chapter questions
Mathematical Calculation	Labeling numbers, signs Applying computational skills	Tests basic math facts Assurance of mastery
Mathematical Reasoning	Formulating hypotheses Recognizing when to add, subtract, multiply, divide	Story problems Reciting order of operations
Written Expression	Reproducing correct letter forms Spelling whole words automatically Using correct capitalization, punctuation Automatically producing forms	Spelling tests Writing samples Spontaneous writing Daily oral language
Oral Expression	Processing words as needed Self-talking	Observations
Listening Comprehension	Remembering what was heard Associating what was heard with previously stored information Accessing desired information Associating sounds with letters	Answering questions Retelling stories Paraphrasing Summary

Chart 5

Analysis of Student Performance

Expression

Reconstruct, Demonstrate, Share

Directions: Please circle the area of student difficulty and the source of information based on your analysis of the student's work.

Area of achievement	Student has difficulty with	Sources of information
Basic Reading Skills	Reciting letter names and sounds Decoding words and sentences	Oral reading Timed readings
Reading Comprehension	Identifying significant details, main ideas Restating information Reading with fluency	Mapping/outlining Work completion
Mathematical Calculation	Writing numerals, symbols with appropriate concept/process	Worksheets
Mathematical Reasoning	Measuring distance, weights, area, volume Telling time, temperature Counting money	Observations, math games Life skills Lunch money Employer reports
Written Expression	Producing different formats Documenting information	Letter writing Compositions Reports
Oral Expression	Speaking with oral fluency Pronouncing words correctly Ordering words into sentences Stating ideas Responding Asking questions	Class presentations Restating questions Class participation
Listening Comprehension	Following directions	Observations Work completion

Chart 6

Analysis of Student Performance

Manipulation

Evaluate, Integrate, Translate

Directions: Please circle the area of student difficulty and the source of information based on your analysis of the student's work.

Area of achievement	Student has difficulty with	Sources of information
Basic Reading Skills	Associating sounds with written symbols Blending sounds into meaningful units Applying dictionary skills	Reading flash cards Alphabetizing Worksheets
Reading Comprehension	Analyzing sentences, paragraphs, stories Synthesizing related material Inferring meaning Paraphrasing information read Interpreting notes taken from lecture presentation	Class discussions Analysis of plot, character, etc. Reading strategies
Mathematical Calculation	Using computer, calculator Matching, sorting, classifying Associating numeral/symbol with concept/process Calculating	Assignments Computer games
Mathematical Reasoning	Solving word problems Applying concepts, e.g. before and after, right and left, up and down Formulating problem solving options	Check writing and check ledgers Assignments, reports Science fair projects Simulation
Written Expression	Changing word forms Writing meaningful sentences Using information in various forms Choosing accurate descriptive language	Worksheets Compositions Reports, stories, essays, poetry, notes, outlines, letters, job applications
Oral Expression	Grouping words into sentences Arranging meaningful sentences Participating in discussions	Observations Demonstrations Speeches
Listening Comprehension	Integrating current auditory information with past experience Associating meaning with spoken word	Paraphrasing Vocabulary drills Story completion Interpreting meaning

IP Student Interview

Student's Name _____ Grade ____ Birth Date _____

General Education Teacher _____ Date _____

Assessor _____

Directions: Which word best describes you. (Read items to student and modify as needed.)

1. After hearing new information, I learn it by saying it again to myself. (S)	Usually	Sometimes	Seldom
2. I spell words by seeing the word in my mind. (S)	Usually	Sometimes	Seldom
3. I spell words by sounding out the letters. (S)	Usually	Sometimes	Seldom
4. I turn my assignments in on time. (O)	Usually	Sometimes	Seldom
5. My locker and desk are in order. (O)	Usually	Sometimes	Seldom
6. I run out of space when I am writing. (O)	Usually	Sometimes	Seldom
7. When I write papers, I get information before I begin writing. (O)	Usually	Sometimes	Seldom
8. I make notes or an outline before I write. (O)	Usually	Sometimes	Seldom
9. I edit or change my writing at least once before handing my paper in to the teacher. (O)	Usually	Sometimes	Seldom
10. When I do a math story problem, I think about the information before I do the work. (O)	Usually	Sometimes	Seldom
11. I can tell a story in the right order. (O)	Usually	Sometimes	Seldom
12. I know how to study for a test. (O)	Usually	Sometimes	Seldom
13. I remember things without having them repeated. (A)	Usually	Sometimes	Seldom
14. I learn new things easily. (A)	Usually	Sometimes	Seldom
15. I understand what I read. (A)	Usually	Sometimes	Seldom
16. I understand what someone tells me. (A)	Usually	Sometimes	Seldom
17. I understand my class work. (A)	Usually	Sometimes	Seldom

18. I know my basic addition facts. (R)	Usually	Sometimes	Seldom
19. I know my basic multiplication facts. (R)	Usually	Sometimes	Seldom
20. I use pictures when I do a math problem. (R)	Usually	Sometimes	Seldom
21. I remember things from the past. (R)	Usually	Sometimes	Seldom
22. I remember the specific information I have studied for a test. (R)	Usually	Sometimes	Seldom
23. I like to play games that are timed. (R)	Usually	Sometimes	Seldom
24. I do things at a fast rate of speed. (R)	Usually	Sometimes	Seldom

25. I can tell you how to get around the building. (E)	Usually	Sometimes	Seldom
26. I like to: read aloud (E)	Usually	Sometimes	Seldom
draw (E)	Usually	Sometimes	Seldom
give oral reports (E)	Usually	Sometimes	Seldom
do an experiment (E)	Usually	Sometimes	Seldom
show how to do something (E)	Usually	Sometimes	Seldom
write (E)	Usually	Sometimes	Seldom
do math problems (M)	Usually	Sometimes	Seldom
27. I can find more than one way to answer a question. (M)	Usually	Sometimes	Seldom
28. I can explain what I learn to my parents. (M)	Usually	Sometimes	Seldom

Write your answers to these questions.

29. Name two things that are alike and tell why. (M,E) 1) _____ 2) _____

30. Name two things that are different and tell why. (M,E) 1) _____ 2) _____

31. How do you remember new information, such as spelling words, a friend's phone number, etc.? (S,O,E)

32. What are the names of all of your teachers including phy-ed, music and art? (S,O,E)

_____ _____ _____

_____ _____ _____

_____ _____ _____

S = Storage, 0 = Organization, A = Acquisition, R = Retrieval, E = Expression, M = Manipulation of information

IP Teacher Interview

Student's Name _____ Grade ____ Birth Date _____

General Education Teacher _____ Date _____

Assessor _____

Directions: Please rate the student on the following behaviors that might indicate the presence of an information processing condition. Each section represents one component of information processing. Additional information may be recorded on a separate sheet of paper on the back of this form.

Storage	Almost Always	Frequently	About 1/2 the time	Seldom	Hardly ever	Not observed
Follows two- to three-step directions	❑	❑	❑	❑	❑	❑
Immediately recalls information	❑	❑	❑	❑	❑	❑
Retains sequences	❑	❑	❑	❑	❑	❑
Grasps simple word meanings	❑	❑	❑	❑	❑	❑
Recognizes or recalls information over time	❑	❑	❑	❑	❑	❑

Organization	Almost Always	Frequently	About 1/2 the time	Seldom	Hardly ever	Not observed
Hands in assignments on time	❑	❑	❑	❑	❑	❑
Has an organized locker or desk	❑	❑	❑	❑	❑	❑
Completes assignments	❑	❑	❑	❑	❑	❑
Uses planning skills	❑	❑	❑	❑	❑	❑
Aligns work spatially	❑	❑	❑	❑	❑	❑
Sequences information	❑	❑	❑	❑	❑	❑

Acquisition	Almost Always	Frequently	About 1/2 the time	Seldom	Hardly ever	Not observed
Links new information to that previously learned	❑	❑	❑	❑	❑	❑
Obtains information by hearing	❑	❑	❑	❑	❑	❑
Obtains information by seeing	❑	❑	❑	❑	❑	❑
Obtains information by reading	❑	❑	❑	❑	❑	❑
Obtains information by touching	❑	❑	❑	❑	❑	❑
Obtains information through multi-sensory approach	❑	❑	❑	❑	❑	❑
Can discriminate visually	❑	❑	❑	❑	❑	❑
Can discriminate auditorily	❑	❑	❑	❑	❑	❑

Retrieval	Almost Always	Frequently	About 1/2 the time	Seldom	Hardly ever	Not observed
Responds in acceptable amount of time	❑	❑	❑	❑	❑	❑
Develops strategies to help recall information	❑	❑	❑	❑	❑	❑
Can name and label	❑	❑	❑	❑	❑	❑
Recalls sounds associated with letters and words	❑	❑	❑	❑	❑	❑
Counts and calculates automatically	❑	❑	❑	❑	❑	❑
Recalls sequential steps for tasks	❑	❑	❑	❑	❑	❑

Expression	Almost Always	Frequently	About 1/2 the time	Seldom	Hardly ever	Not observed
Demonstrates oral fluency	❑	❑	❑	❑	❑	❑
Demonstrates reading fluency	❑	❑	❑	❑	❑	❑
Demonstrates writing fluency	❑	❑	❑	❑	❑	❑
Responds appropriately to nonverbal communication	❑	❑	❑	❑	❑	❑
Asks questions/gives answers related to content	❑	❑	❑	❑	❑	❑
Participates in class activities	❑	❑	❑	❑	❑	❑

Manipulation	Almost Always	Frequently	About 1/2 the time	Seldom	Hardly ever	Not observed
Applies learned information to new situations	❑	❑	❑	❑	❑	❑
Infers information	❑	❑	❑	❑	❑	❑
Summarizes information	❑	❑	❑	❑	❑	❑
Interprets information	❑	❑	❑	❑	❑	❑
Writes sentences of varying length and complexity	❑	❑	❑	❑	❑	❑
Analyzes and solves problems of varying complexity	❑	❑	❑	❑	❑	❑
Interprets social cues	❑	❑	❑	❑	❑	❑
Differentiates details from key concepts	❑	❑	❑	❑	❑	❑

Comments and observations:

IP Standardized Test Grid

Student's Name _____ Grade ____ Birth Date _____

General Education Teacher _____ Date _____

Assessor _____

Directions: This form may be used by an assessor to identify subtests in standardized tests that may indicate an information processing condition.

Caution: Minnesota rule requires that an information processing condition or deficit be verified in more than one setting. It is important to remember that many standardized tests are not designed for nor do they purport to measure information processing conditions. However, a trained examiner may be able to identify a suspected area of information processing difficulty or a trend in a student's subtest scoring patterns related to an information processing deficit.

	Test:	Test:	Test:	Test:
Storage				
Organization				
Acquisition				
Retrieval				
Expression				
Manipulation				

IP Assessment Interpretation

Student's Name _____ Grade ____ Birth Date _____

General Education Teacher _____ Date _____

Assessor _____

Directions: Record information gathered from the sources listed below and code by the appropriate SOAR'EM area. Example: The teacher interview is checked for "hardly ever" under hands in assignments and uses planning skills. Both would be written in the weaknesses column by the source box labeled Teacher Interview. Example: uses planning skills (0), hands in assignments (0). "0" stands for organization.

SOURCES	STRENGTHS	WEAKNESSES
Referral Form		
Review of Existing Data Questions		
Analyzing Student Work		
SLD Observation		
Teacher Interview		
Home and Family Interview		
Student Interview		
Standardized Testing Grid		

IP Data Summary Sheet

Student's Name _____ Grade ____ Birth Date _____

General Education Teacher _____ Date _____

Assessor _____

Directions: Record areas of difficulty identified through the assessment process; list sources for the information and settings in which the difficulty was observed.

Area	Problem	Setting	Source
Storage			
Organization			
Acquisition			
Retrieval			
Expression			
Manipulation			

EXAMPLES OF SETTINGS		EXAMPLES OF SOURCES	
School • Classroom • Lunchroom • Halls • Phy-ed • Bus • One to one testing • Math class • Reading class • Office	**Home** • Meal time • Play time • Chores **Community** • Employment • Recreational facilities • Church • Clubs • Bus	• Performance-based assessment measures • Standardized tests (group or individual) • Formal observation • Family members • Documented interventions • Evaluation of daily work • Observation	• Portfolio or authentic assessment • District reporting system • Outside agency evaluation • Student's self assessment

Information Processing Tally Sheet

Student's Name _____ Grade ____ Birth Date _____

General Education Teacher _____ Date _____

Assessor _____

The purpose of this tally sheet is to provide the number of items noted in each of the six components of information processing on the forms presented in Section 4: Severe Underachievement and in this section.

Directions:

1. *Complete each of the items by filling in the top number of checked items for each form used. Note: There are optional areas for scoring additional SLD Observations and Teacher Interviews if more than one form is used. If necessary add information in the rows.*
2. *Add the <u>top</u> numbers for each of the columns and write the result in the total box.*
3. *Add the bottom numbers for each vertical column and subtract N/A responses from the bottom numbers. Write the result in the total box.*
4. *Once tallying is completed, the team can interpret the information along with other data sources related to information processing.*

Caution: There is no predetermined cutoff when using this chart.

Instrument	Storage	Organization	Acquisition	Retrieval	Expression	Manipulation
SLD Observation #1	/ 3	/ 4	/ 2	/ 3	/ 3	/ 3
Optional SLD Observation #2	/	/	/	/	/	/
Optional SLD Observation #3	/	/	/	/	/	/
Optional Teacher Interview #1	/ 5	/ 6	/ 8	/ 6	/ 6	/ 8
Optional Teacher Interview #2	/	/	/	/	/	/
Optional Teacher Interview #3	/	/	/	/	/	/
Optional Teacher Interview #4	/	/	/	/	/	/
Home and Family Interview	/ 2	/ 2	/ 4	/ 4	/ 2	/ 4
Student Interview	/ 5	/ 11	/ 5	/ 7	/ 10	/ 5
Other	/	/	/	/	/	/
Not Observed	/	/	/	/	/	/
TOTAL	/	/	/	/	/	/

SLD Diversity Worksheet

When assessing diverse students, it is recommended the team gather and consider information from a variety of sources, including observations, adaptive behavior scales, classroom samples, and other types of data collection strategies. Teams must document their consideration of procedures used to reduce bias in the assessment process. This form may be attached to the ASR to provide documentation.

Student's Name _____ Grade ____ Birth Date _____

General Education Teacher _____ Date _____

Assessor _____

Assessment using the following data collection methods is recommended to provide information to reduce bias in assessment:

- ❑ Observation
- ❑ Sociocultural Checklist
- ❑ Home and Family Interview

Criteria	Data Source	Interpretation
Severe Underachievement Severe underachievement verified by observation: Yes ❑ No ❑	(Check all that apply) ❑ cumulative record reviews ❑ classwork samples ❑ anecdotal teacher records ❑ formal and informal tests ❑ curriculum-based assessment results ❑ results from instructional support programs such as Title I Parent Information	

Criteria	Data Source	Interpretation
Severe Discrepancy *(check those that apply)* ***Intellectual Ability*** ❑ standardized instruments ❑ supplemental procedures ❑ other data sources ***Achievement*** ❑ basic reading skills ❑ reading comprehension ❑ mathematical calculation ❑ mathematical reasoning ❑ written expression ❑ oral expression ❑ listening comprehension Severe discrepancy verified by observation? ❑ yes ❑ no	Parent Information	
Information Processing *(check all that apply)* ❑ storage ❑ organization ❑ acquisition ❑ retrieval ❑ expression ❑ manipulation Occurs in a variety of settings? ❑ yes ❑ no Setting (circle): home, school, community, work site	Parent Information	

Criteria	Data Source	Interpretation
Exclusionary Factors Must be ruled out as a primary cause of the student's under-achievement. *(check those that apply)* ❑ vision, hearing, or motor impairment ❑ mental impairment ❑ emotional or behavioral disorders ❑ environmental, cultural, or economic influence ❑ history of an inconsistent educational program	Parent Information	
Sociocultural Factors Impact of diversity on student's school performance *(check those that apply)* ❑ race and culture ❑ communication ❑ socioeconomic status ❑ other	Home and Family Interview	

According to IDEA '97, a student is **not** eligible for special education services if one of the following is the determinant (primary) cause for the learning problem. Place a check in the appropriate box below:

A lack if instruction in reading or math ❑ yes ❑ no
Limited English Proficiency ❑ yes ❑ no

Based on the assessment data and other sources of information collected for the student the team has concluded that

The student meets SLD criteria? ❑ yes ❑ no

The student is in need of special education and related services? ❑ yes ❑ no

SLD Exclusionary Factors Checklist

Student's Name _____ Grade ____ Birth Date _____

General Education Teacher _____ Date _____

Assessor _____

Using information gathered from the review of Existing Data, Home and Family Interview, SLD Observation(s), any sociocultural checklists, and other sources, fill in the information on this form.

Vision, Hearing, and Motor Impairment						
Does the student have an impairment in:			If yes, check box if impairment negatively impacts achievement in school.	Is the impairment the primary reason for the student's underachievement?		
	Yes	No			Yes	No
Vision	❑	❑	❑		❑	❑
Hearing	❑	❑	❑		❑	❑
Motor	❑	❑	❑		❑	❑

List sources used to make this determination:

_____ _____

_____ _____

Briefly state the basis for the team's decision and include it in the ASR:

_____

_____

_____

Mental Impairment

Does the student have a mental impairment?	If yes, check the box if the impairment negatively impacts achievement in school.	Is the impairment the primary reason for the student's underachievement?
Yes ❑ No ❑	❑	Yes ❑ No ❑

List sources used to make this determination:

_____ _____

_____ _____

Briefly state the basis for the team's decision and include it in the ASR:

_____

_____

_____

Emotional or Behavioral Disorders (EBD)

Does the student have an emotional or behavioral disorder?	If yes, check the box if this disorder negatively impacts achievement in school.	Is the disorder the primary reason for the student's underachievement?
Yes ❑ No ❑	❑	Yes ❑ No ❑

List sources used to make this determination:

_____ _____

_____ _____

Briefly state the basis for the team's decision and include it in the ASR:

_____

_____

_____

Environmental, Cultural or Economic Influences

Are any of the following influences an issue for the student?	Yes	No	If yes, check the box if this influence negatively impacts achievement in school.	Is this (are these) influence(s) the primary reason for the student's underachievement?	Yes	No
Environmental	❑	❑	❑		❑	❑
Cultural	❑	❑	❑		❑	❑
Economic	❑	❑	❑		❑	❑

List sources used to make this determination:

_____ _____

_____ _____

Briefly state the basis for the team's decision and include it in the ASR:

_____

_____

_____

History of an Inconsistent Education Program

Does the student have an inconsistent education program?	Yes	No	If yes, check the box if it negatively impacts achievement in school.	Is an inconsistent education program the primary reason for the student's underachievement?	Yes	No
	❑	❑	❑		❑	❑

List sources used to make this determination:

_____ _____

_____ _____

Briefly state the basis for the team's decision and include it in the ASR:

_____

_____

_____

Lack of Instruction in Reading or Math or LEP

Does the student have a: Lack of instruction in:			If yes, check the box if the issue negatively impacts achievement in school.	Is the issue the primary reason for the student's underachievement?	
	Yes	No		Yes	No
Reading or math	❑	❑	❑	❑	❑
LEP	❑	❑	❑	❑	❑

List sources used to make this determination:

_____ _____

_____ _____

Briefly state the basis for the team's decision and include it in the ASR:

_____

_____

_____

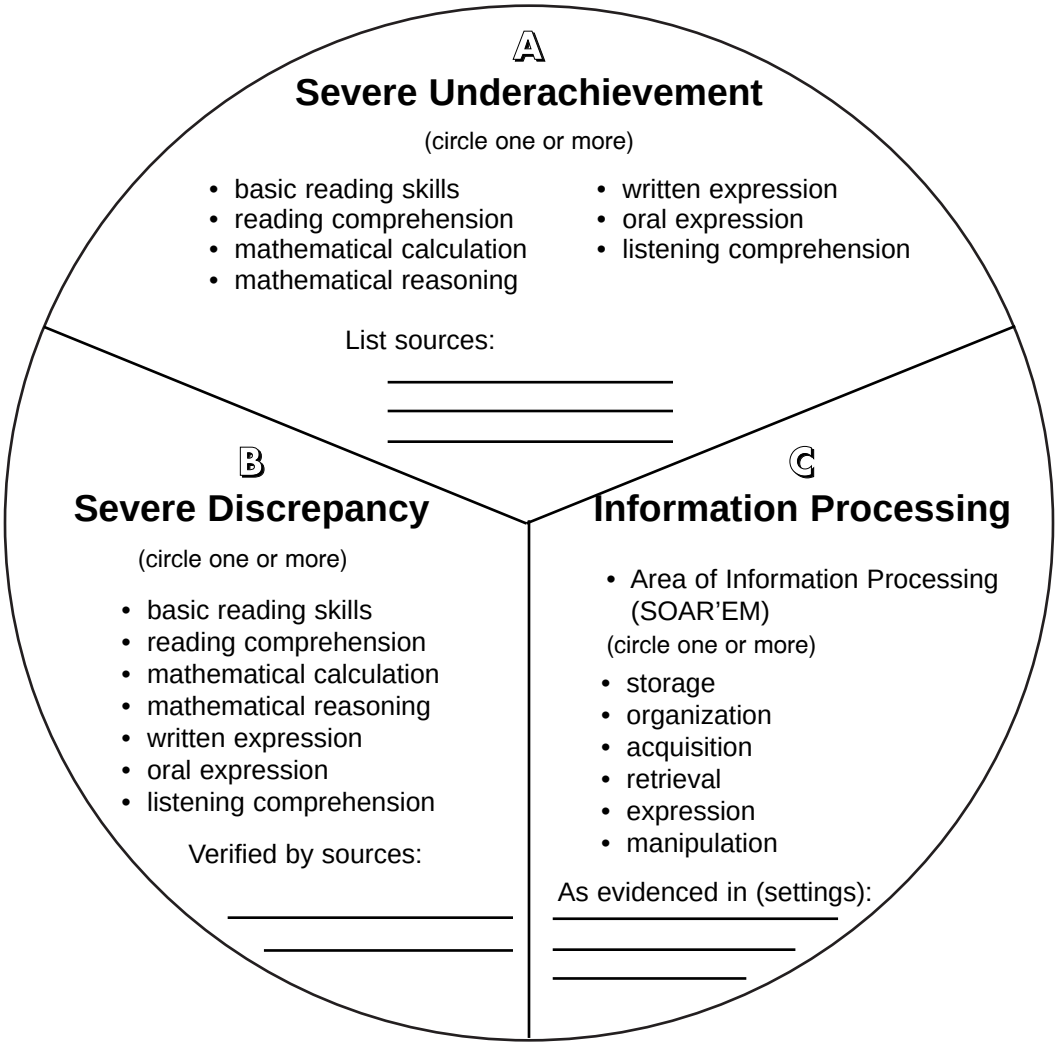
SLD Exclusionary Factors Determination

❑ The team has determined that an exclusionary factor is not the primary reason for the student's underachievement.

❑ The team has determined that _____ (enter exclusionary factor) is the primary reason for the student's underachievement; therefore, the student does not meet eligibility criteria for SLD.

Chart 1

SLD Eligibility Criteria

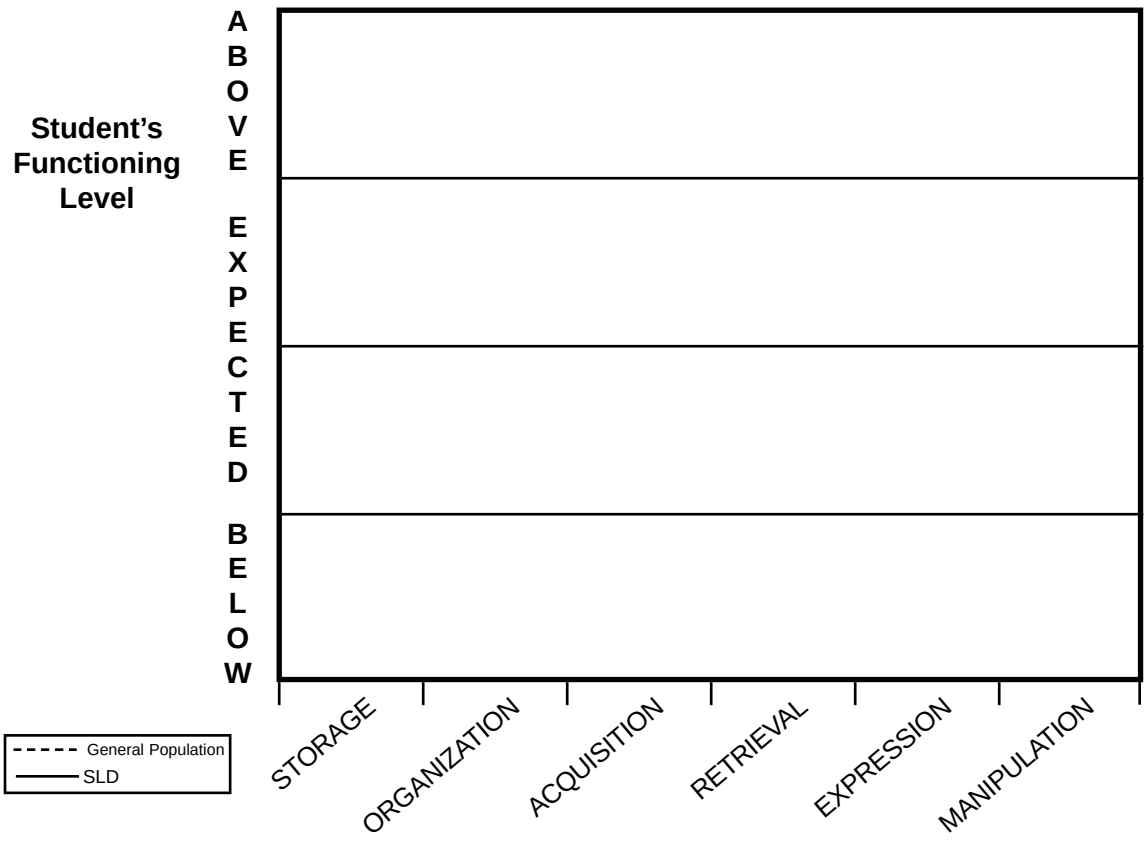


Information Processing Components

Storage: the process of adding information to existing information
Organization: the process of structuring information, i.e., categorizing, sequencing, etc.
Acquisition: the process of accurately gaining, receiving, and/or perceiving information
Retrieval: the process of locating or recalling stored information
Expression: the process of communicating information
Manipulation: the process of applying, using, or altering information

Chart 2

Information Processing Profile



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Contained in this Appendix

Early Childhood: Special Education Criteria

Inventories of Concepts About Print

Inventory of Early Reading Skills

Inventory of Early Math Skills

Inventory of Early Writing Skills

Checklist of Deficit Patterns for Children Ages 6-9 Who May Have an SLD

3.3.4 Early Childhood: Special Education (ECSE)

A. Definition
Early childhood special education must be available to pupils from birth to seven years of age who have a substantial delay or disorder in development or have an identifiable sensory, physical, mental, or social/emotional condition or impairment known to hinder normal development and need special education. M.R. 3525.1350 Subp. 1.

B. Criteria for Children from Birth through Two Years and 11 Months
The team shall determine that a child from birth through the age of two years and 11 months is eligible for early childhood special education if:

1. the child meets the criteria of one of the disability categories; or

2. the child meets one of the criteria in subitem a, in addition to criteria in subitems b and c.

a. The child:
   i. has a medically diagnosed syndrome or condition that is known to hinder normal development including but not limited to cerebral palsy, chromosome abnormalities, fetal alcohol syndrome, maternal drug use, neural tube defects, neuralmuscular disorders, cytomegalovirus, grades III and IV intracranial hemorrhage, and bronchiopulmonary dysplasia (BPD);

   ii. has a delay in overall development demonstrated by a composite score of 1.5 standard deviations or more below the mean on an assessment using at least one technically adequate, norm-referenced instrument that has been individually administered by an appropriately trained professional; or

   iii. is less than 18 months of age and has a delay in motor development demonstrated by a composite score of 2.0 standard deviations or more below the mean on an assessment using technically adequate, norm-referenced instruments. These instruments must be individually administered by an appropriately trained professional.

b. The child's need for instruction and services is supported by at least one documented, systematic observation in the child's daily routine setting by an appropriate professional. If observation in the daily routine setting is not possible, the alternative setting must be justified.

c. There is corroboration of the developmental or medical assessment with a developmental history and at least one other assessment procedure that is conducted on a different day than the medical or norm-referenced assessment. Other procedures may include parent report, language sample, criterion-referenced instruments, or developmental checklists. M.R. 3525.1350 Subp. 2.

C. Criteria for Children from Three through Six Years and 11 Months
The team shall determine that a child from the age of three years through the age of six years and 11 months is eligible for early childhood special education when:

1. the child meets the criteria of one of the disability categories; or
2. the child meets one of the criteria in subitem a, in addition to criteria in s subitems b and c.

a. The child:
   i. has a medically diagnosed syndrome or condition that is known to hinder normal development including cerebral palsy, chromosome abnormalities, fetal alcohol syndrome, maternal drug use, neural tube defects, neural muscular disorders, cytomegalovirus, grades III and IV intracranial hemorrhage, and bronchopulmonary dysplasia (BPD); or

   ii. has a delay in each of two or more areas of development that is verified by an assessment using technically adequate, norm-referenced instruments. Subtests of instruments are not acceptable. The instruments must be individually administered by appropriately trained professionals and the scores must be at least 1.5 standard deviations below the mean in each area.

b. The child's need for special education is supported by at least one documented, systematic observation in the child's daily routine setting by an appropriate professional. If observation in the daily routine setting is not possible, the alternative setting must be justified.

c. There is corroboration of the developmental or medical assessment with a developmental history and at least one other assessment procedure in each area that is conducted on a different day than the medical or norm-referenced assessment.

Other procedures may include parent report, language sample, criterion-referenced instruments, or developmental checklists. M.R. 3525.1350 Subp. 3.

Inventory of Concepts About Print

Adapted from ***The Early Detection of Reading Difficulties*** by Marie M. Clay

Student_____ Grade _____ Birth Date_____
General Education Teacher _____ Date _____
Assessor _____

This inventory is designed to be used to gather information about a student's concepts about print. It is not a normed or standardized instrument and is not intended to be formally scored.

Select a book appropriate for the student with whom you are working. Use different pages for the various tasks, if possible.

◆ Orientation of Book

NOTES

Pass book to student holding it vertically by outside edge, spine toward student.

Say: Show me the front of this book.

◆ Concept That Print Carries Message

Say: I'll read this story. You help me. Show me where to start reading. Where do I begin to read?

(Read text.)

◆ Directional Rules

Say: Show me where to start.

Say: Which way do I go?

Say: Where do I go after that?

NOTES

- **Word by Word Pointing**

  Say: Point to it while I read it.

  (Read slowly, but fluently.)

- **Concept of First and Last**

  Say: Show me the first part of the story.
  Show me the last part.

- **Inversion of Picture**

  (Present open book upside down.)

  Say: Show me the bottom of the picture.

- **Response to Inverted Print**

  (Present book upside down.)

  Say: Where do I begin?
  Which way do I go?
  Where do I go after that?

- **Line Sequence**

  Say: What's wrong with this?

  (Read immediately the bottom line first,
  then the top line. Do not point.)

- **Page Sequence**

  (Open book to left and right pages of print.)

  Say: Where do I start reading?

NOTES

- **Word Sequence**

  Say: What's wrong on this page?

  (Point to page number. Read text slowly backward, as if correct.)

- **Meaning of Punctuation**

  Say: What's this for?

  (Point to a question mark, period, comma and quotation marks.)

- **Capital and Lower Case Correspondence**

  Say: Find a letter like this.

  (Point to an upper case "T" and demonstrate by pointing to a lower case "t" if the child does not succeed.)

  Say: Find a letter like this.

  (Point to "M" and "H" in turn.)

- **Reversible Words**

  (Read the text.)

  Say: Show me "was."
  Show me "no."

◆ **Letter Concepts** **NOTES**

(Have two cards like notecards that the student can slide easily over the text. Demonstrate the movement of cards.)

Say: This story says (read a short sentence). I want to push the cards across the story like this until all you can see is just one letter.

(Demonstrate the movement of cards again.)

Say: Now show me two different letters.

◆ **Word Concepts**

Say: Show me just one word. Now show me two words.

◆ **First and Last Concept**

Say: Show me the first letter of a word. Show me the last letter of a word.

◆ **Capital Letter Concepts**

Say: Show me a capital letter.

Summary of Student's Skills with Print Concepts:

Inventory of Early Reading Skills

Letter and Word Identification

Adapted from ***The Early Detection of Reading Difficulties*** by Marie M. Clay

This is an inventory of skills, not a normed or standardized instrument. It should be used to gather information about a student's letter and word identification skills.

Letter Identification:

- ✔ Using the attached sheet of large print alphabet letters. Have the student read across the lines so that the letters appear in random order.
- ✔ Use an identical sheet to record responses.
- ✔ Introduce the task by asking, "What do you call these? Can you find some that you know?" Point to each letter and ask, "What is this one?" Give encouragement if the student does not respond.
- ✔ Accept as correct an alphabet letter named, a sound produced for the letter or a response that indicates a word that begins with the same sound.
- ✔ Record any incorrect responses and your observations.

Word Identification

- ✔ You may use the attached sheet of words for this inventory. Administer only one list. It is important in the early assessment of skills that the assessment is linked closely to instruction. The most frequently occurring words in the materials used for instruction should be the ones used for the word identification inventory. If the words on these lists do not match those introduced in the student's instruction, compile your own appropriate list.
- ✔ Use an identical sheet for recording student's responses.

Student _____ Grade _____ Birth Date _____
General Education Teacher _____ Date _____
Assessor _____

Letter Identification List

A	F	K	P	W	Z
B	H	O	J	U	
C	Y	L	Q	M	
D	N	S	X	I	
E	G	R	V	T	
a	f	k	p	w	z
b	h	o	j	u	a
c	y	e	q	m	
d	n	s	x	i	
e	g	r	v	t	g

Student _____ Grade _____ Birth Date _____
General Education Teacher _____ Date _____
Assessor _____

Word Identification List

LIST A	**LIST B**	**LIST C**
Practice Word	Practice Word	Practice Word
the	***said***	***is***
I	and	Father
Mother	to	come
are	will	for
here	look	a
me	he	you
shouted	up	at
am	like	school
with	in	went
car	where	get
children	Mr	we
help	going	they
not	big	ready
too	go	this
meet	let	boys
away	on	please

Inventory of Early Math Skills

Adapted from ***Mathematics Their Way*** by Mary Baratta-Lorton

Student _____ Grade _____ Birth Date _____
General Education Teacher _____ Date _____
Assessor _____

This is an inventory of skills. It is not a normed or standardized instrument. It is intended to be used to gather information about a student's skills and is not intended to be scored formally. The components within each level are arranged to describe successively more sophisticated math skills.

Pattern: *Student can:*

NOTES

- ❑ reproduce rhythmic pattern
- ❑ recognize simple pattern in dot chart
- ❑ translate pattern to different form
- ❑ reproduce and extend pattern
- ❑ describe pattern
- ❑ observe similarities and differences in patterns
- ❑ match
- ❑ use left to right progression
- ❑ create original patterns
- ❑ copy written numerals

Sorting and Classifying: *Student can:*

- ❑ observe and describe properties of objects
- ❑ notice similarities and differences
- ❑ think logically
- ❑ make predictions
- ❑ draw conclusions
- ❑ solve problems
- ❑ sort objects by properties
- ❑ make judgments
- ❑ describe the properties used to sort a group of objects
- ❑ find different solutions to a problem
- ❑ analyze and describe common properties of a group of objects
- ❑ organize information
- ❑ select objects with a particular property
- ❑ connect an abstract idea to the real world
- ❑ follow directions

Counting: *Student can:*

NOTES

- ❑ count by rote in sequence
- ❑ demonstrate one-to-one correspondence
- ❑ understand conservation of number
- ❑ understand permanence of objects
- ❑ use counting sequence to determine
- ❑ quantity
- ❑ count sequentially
- ❑ count backward

Comparing: *Student can:*

- ❑ compare
- ❑ match
- ❑ draw conclusions
- ❑ see relationships
- ❑ solve problems
- ❑ order
- ❑ predict
- ❑ think logically

Graphing: *Student can:*

- ❑ organize data in a systematic way to discover
- ❑ patterns
- ❑ add
- ❑ subtract

Understanding Number Concepts: *Student can:*

- ❑ count
- ❑ discover relationships among different quantities
- ❑ think logically
- ❑ make patterns
- ❑ visualize
- ❑ make and check predictions
- ❑ follow directions
- ❑ recognize a quantity without counting
- ❑ do multiplication with manipulatives
- ❑ do division with manipulatives
- ❑ solve oral story problems with props

Application and Extension at the Symbolic Level: *Student can:*

- ❑ label concepts with a mathematical symbol measure
- ❑ understand beginning ideas of time and money
- ❑ understand beginning concept of place value

NOTES

In summary, this student's skills differ markedly from the norm of his or her peers in the following areas:

- ❑ pattern
- ❑ sorting and classifying
- ❑ counting
- ❑ comparing
- ❑ graphing
- ❑ understanding number concepts
- ❑ application and extension at the symbolic level

Inventory of Early Writing Skills

Adapted from ***The Early Detection of Reading Difficulties*** by Marie M. Clay

Student _____ Grade _____ Birth Date _____
General Education Teacher _____ Date _____
Assessor _____

This is an inventory of skills. It is not normed or standardized and is intended to be used to gather information about a young student's skills.

Analysis of Writing Sample:

Take three samples of the student's stories and rate them for language level, message quality and directional features. Components at each level are arranged to describe successively more sophisticated writing.

Language Level

NOTES

- ❑ alphabetic (letters only)
- ❑ word (any recognizable word)
- ❑ word group (any two-word phrase)
- ❑ sentence (any simple sentence)
- ❑ punctuated story (two or more sentences)
- ❑ paragraphed story (two themes)

Message Quality

- ❑ has concept of signs (uses letters, invents letters, uses punctuation)
- ❑ has concept that a message is conveyed
- ❑ a message is copied
- ❑ repetitive use of sentence patterns like "Here is a ..."
- ❑ attempts to record own ideas
- ❑ successful composition

Directional Principles

- ❑ no evidence of directional knowledge
- ❑ part of the directional pattern is known; start top left, or move let to right, or return down left

- ❑ reversal of the directional pattern (down, right to left)
- ❑ correct directional pattern
- ❑ correct directional pattern and spaces between words
- ❑ extensive text without any difficulties of arrangement and spacing of text

NOTES

Test of Writing Vocabulary:

Give the student a blank piece of paper and pencil and say, "I want to see how many words you can write. Can you write your name? (Begin ten-minute timing.)

If student says "No," ask him if he knows any single-letter or two-letter words. "Do you know how to write 'is'?, 'to'?, 'I'?, 'a'?

If the student says "Yes" say, "Write your name for me." When the student finishes say, "Good. Now think of all the words you know how to write and write them all for me."

Give the student 10 minutes to write known words. When the student stops writing or appears to need prompting, suggest words that he or she might know how to write.

Continue for 10 minutes or until the student's writing vocabulary is exhausted. Prompts may include questions regarding categories of words, such as "Do you know how to write the names of any animals?"

Tally each word completed accurately as correct. Forms of words can be tallied as separate words.

Summary of Student's Writing Skills:

Checklist of deficit patterns for children ages 6 through 9 who may have a Specific Learning Disability

Adapted from LDA Pamphlet 1991

This information gathering document is provided to assist in transition of service provision from Early Childhood Special Education to kindergarten or grade one.

Student _____ Grade _____ Birth Date _____
General Education Teacher _____ Date _____
Assessor _____

Please check all that apply during an ❑ interview ❑ observation

A. "He knocks into the building blocks, bumps into the door, falls out of his chair, crashes into his playmates, and catapults himself through space."

- ❑ inability to plan for his body in space **NOTES**
- ❑ poor estimates of space
- ❑ poor coordination
- ❑ lurches while walking
- ❑ toe walking
- ❑ sitting in double-jointed fashion

B. "She can talk about topiary trees but she can't pull up her zipper or draw a circle, and hates putting toys and puzzles together."

- ❑ inability to use hands to manipulate objects and toys **NOTES**
- ❑ difficulties with hand-eye coordination
- ❑ clumsiness in knocking over juice and milk

C. "He looks at everything but doesn't seem to see—in fact, his hands seem to see better than his eyes."

- ❑ difficulties in focusing on pictures or objects **NOTES**
- ❑ problems in seeing differences in shapes and colors
- ❑ problems in remembering what he sees
- ❑ cannot remember the order of things he sees
- ❑ inability to make sense out of what he sees

D. "Her big eyes look up at me and she listens, but I don't seem to get through."

- ❑ inability to understand what she hears **NOTES**
- ❑ inability to remember what she hears
- ❑ inability to remember a sequence of sounds
- ❑ overreaction to noise
- ❑ does not enjoy being read to

E. "He understands everything I say to him but he doesn't express himself well—not at all like his brother and sister."

- ❑ delayed speech and language **NOTES**
- ❑ sounds and words out of sequence (where you are, animals, spaghetti)
- ❑ limited vocabulary
- ❑ disorganized phrases
- ❑ inappropriate use of words

F. "He never seems to put together right and yet I dress him better than the others, and tuck him in and fuss over him a lot."

- ❑ disorganized movement **NOTES**
- ❑ disorganized language
- ❑ disorganized appearance
- ❑ a disorganized self

G. "He's so smart yet he has the attention span of a flea–he jiggles all day long, flits from one thing to another, and sometimes sounds like a broken record."

- ❑ distractibility **NOTES**
- ❑ poor attention span
- ❑ impulsivity
- ❑ hyperactivity
- ❑ perseveradon

H. "She's four years old, but acts much younger."

- ❑ immature behavior **NOTES**
- ❑ immature appearance
- ❑ immature speech
- ❑ immature movement
- ❑ selection of younger playmates or solitary play
- ❑ immature choice of and use of toys

I. "He overreacts or underreacts to everything–it's like his internal thermostat is not working."

- ❑ indiscriminate reactions **NOTES**
- ❑ losing emotional control inappropriately
- ❑ laughing one moment and crying the next
- ❑ very low or very high threshold for pain
- ❑ dislike of being touched or cuddled
- ❑ no reaction or overreaction to being touched
- ❑ catastrophic reactions

In summary, please check any of the following characteristics that describe this student's behavior.

- ❑ short attention span/distractibility **NOTES**
- ❑ hyperactivity/constant motion/restlessness/impulsivity
- ❑ speech defect/delay
- ❑ visual/perceptual motor problems
- ❑ emotional lability problems
- ❑ poor social/school adjustment
- ❑ sleep disorders

Using information from A to I, (pages 1and 2), circle the groupings with the highest number of check marks. Include all observations and/or interviews from different settings.

1. Low verbal/high performance group (language disorder) D. E. G.
2. High verbal/low performance group (visual/perceptual disorder) A. B.
3. Mixed perceptual, language deficits (discrepant verbal and performance) C. F. H. I.

1. This student is not eligible for services under any other category: ❑ yes ❑ no
2. This student is discrepant:

   A. between current measures of capacity or ability and achievement (of developmental milestones): ❑ yes ❑ no

   B. within psychological processes (Information processing) that underlie learning, including attention memory, perception, thinking and language: ❑ yes ❑ no

3. This student deviates markedly from the norm of his or her peer group so as to require special education intervention: ❑ yes ❑ no
4. This student's developmental history includes:

   ❑ birth trauma
   ❑ genetic and chromosomal disorders
   ❑ temper tantrums
   ❑ lack of oxygen
   ❑ infections prenatal and postnatal
   ❑ adoption
   ❑ surgery at an early age
   ❑ sensory impairments
   ❑ sleeping difficulties
   ❑ low birth weight
   ❑ neurologic and physical impairments
   ❑ frequent crying
   ❑ feeding problems
   ❑ teratogens
   ❑ other life events

5. This student's current level of functioning is below his or her peer group in the areas of:

   ❑ speech and language development
   ❑ social competence
   ❑ abstract reasoning abilities
   ❑ motor skills
   ❑ conceptual development

   as documented by:

6. Any known family history of learning difficulties: ❑ yes ❑ no
   Explain:

7. Please state the appropriateness for identifying this preschool student with a specific learning disability from the use of formal and informal assessments in the following areas:

   ❑ PREreading ❑ PREwriting ❑ PREmathematics

   The statements must be identifiable, measurable and observable. Include the information on the Assessment Summary Report.

Contained in this Appendix

Prereferral Interview (Screening Checklist) for SLD

Reference the Indicators of OL and LC in SD

Monitoring and Compliance Form 3.3.12

Prereferral Interview
Screening Checklist for SLD

The following characteristics are identified in the research literature as associated with SLD. The evaluator should be aware that developmental phases, opportunity to practice, and the nature of instruction may result in a student experiencing difficulty with any of these behaviors. It is imperative that general and special education teachers, parents and any referring person understand the school's curriculum sequence and appropriate developmental norms for the student's age.

Instructions: *Check all the following characteristics that are unusual for the student's age and developmental level. This instrument may be used along with the Home and Family Interview to gather information from parents.*

Student _____ Grade _____ Birth Date _____

General Education Teacher _____ Date _____

Assessor _____

Overall Performance

The student:

- ❑ Does not perform academically when exposed to conventional teaching strategies.
- ❑ Has inconsistent performance on tests measuring expected functioning and performance.
- ❑ Has short attention span; inability to concentrate on a task for a reasonable length of time.
- ❑ Lacks organizational skills typically expected of someone his or her age.
- ❑ Is unable to follow and participate in class discussions.
- ❑ Has difficulty understanding the meaning of time.
- ❑ Has trouble with the completion of tasks.
- ❑ Has difficulty with writing sentences or paragraphs.
- ❑ Has great performance strengths and extreme weaknesses.
- ❑ Has difficulty with whole group instruction.
- ❑ Generalizes rules and concepts learned in one situation to another setting.

Reading

The student has difficulty with:

- ❑ Recognizing words.
- ❑ Identifying similar letters and words.
- ❑ Reversing and inverting letters and words after age 8.

- ❑ Following and retaining visual sequences.
- ❑ Oral reading and substituting one word for another.
- ❑ Predicting outcomes, making judgments, and drawing conclusions or generating alternatives.
- ❑ Reading all the words in the written passage and omitting words and phrases.
- ❑ Separating words into phonemes and syllables, blending phonemes into whole words.
- ❑ Recalling sounds associated with letters and words.
- ❑ Auditory sequences.
- ❑ Auditory tasks.
- ❑ Understanding cause-effect relationships.

Writing and Drawing

The student has difficulty with:

- ❑ Forming letters or digits correctly.
- ❑ Copying.
- ❑ Staying on or between lines.
- ❑ Spelling.
- ❑ Writing.
- ❑ Judging length and width of letters.
- ❑ Recalling letter formation.
- ❑ Formulating compound or complex sentences.
- ❑ Transferring an oral story to paper.
- ❑ Writing an organized paragraph using related sentences of varying length and grammatical complexity.

Mathematics

The student has difficulty with:

- ❑ Analyzing and solving math problems (one or multiple step).
- ❑ Counting.
- ❑ Sequencing math problems.
- ❑ Understanding concepts of space, time, size, distance, quantity and length.
- ❑ Counting and basic mathematical calculations (needs guides or manipulatives).
- ❑ Writing numerals (makes reversals after age 8).

Social/Behavioral

The student has difficulty with:

- ❑ Anxiety.
- ❑ Perseveration.
- ❑ Distractibility.
- ❑ Memory.
- ❑ Disruptive behavior.
- ❑ Concentration.
- ❑ Sleep disturbance (tired, lethargic).
- ❑ Low frustration threshold.
- ❑ Impulsivity.
- ❑ Little initiation of activities.
- ❑ Attention (hyperactivity, hypoactivity).
- ❑ Self-sufficiency (dependent on teacher, parent or peers).
- ❑ Rapid or frequent dramatic mood changes.
- ❑ Inappropriate emotional responses to social situations.
- ❑ Orienting him- or herself in a familiar setting such as school, playground or neighborhood.
- ❑ Comprehending the feelings of others.
- ❑ Tolerance for change or transition.
- ❑ Interpreting nonverbal communication.
- ❑ Building and maintaining friendships (being accepted by peers).
- ❑ Comprehending the "culture" of the school, or the "unwritten laws," that make up the mores of the particular school (this could be a cultural issue in the case of recent immigrants, American Indian, or other culturally diverse students).

Communication Skills

The student has difficulty with:

- ❑ Grasping simple word meanings.
- ❑ Comprehending word meanings in connected speech isolation, but understanding the same words in isolation.
- ❑ Using complete sentences without many grammatical errors in oral speech.
- ❑ Expressing and organizing ideas.
- ❑ Giving clear and appropriate directions.
- ❑ Recognizing and comprehending figurative language such as similes,metaphors, idioms, personification and alliteration.
- ❑ Knowing when to use informal language.
- ❑ Overusing gestures for communication (caution: this behavior may be due to cultural or geographic factors).
- ❑ Interpreting and/or using vocal pitch, intensity and timing.
- ❑ Comprehending rapid speech.
- ❑ Acquiring and using grammatical rules.

Motor Skills

The student has difficulty with:

- ❑ General coordination and falls, stumbles or bumps into objects or others frequently.
- ❑ Fine motor tasks.
- ❑ Orientation in writing and displays mirror writing.
- ❑ Organizing written composition.
- ❑ Maintaining equilibrium and touches tables, chairs or desks when moving about the room.
- ❑ Differentiating between right and left.

Information Processing Skills

The student has difficulty with:

- ❑ Maintaining a rate of speed in completing classwork or giving responses commensurate peers.
- ❑ Using long- and short-term memory skills.
- ❑ Retrieving information.
- ❑ Comprehending visual or auditory input.
- ❑ Understanding spatial relationships and organization.
- ❑ Discriminating left from right.

Possible Indicators of Oral Language Problems

Researchers in the field of speech and language disorders have identified the following characteristics of students who have oral language problems. This list is meant to serve as a guide for discussion in the assessment process. If a student exhibits some of the following characteristics, assessment in the speech language area and/or in the area of oral language may be needed.

Characteristics of Students with Oral Language Problems

Students may:

- Have a limited spontaneous speech flow.
- Occasionally produce novel words and phrases such as "My earsight is good."
- Use "immature for age" grammatical forms such as _____.
- Have a limited vocabulary.
- Frequently use nonspecific terms such as "thing" and "stuff."
- Frequently use indefinite references such as "that" and "there."
- Not understand jokes.
- Describe pictures rather than constructing narratives reflecting a grasp of story telling.
- Lack transitions in telling stories.
- Have a delayed response time to questions.
- Give short and incomplete, incorrect or inappropriate responses to questions.
- Make many revisions in oral responses, i.e., false starts, interruption of self, and starting over.
- Change topics so suddenly that the listener is apt to get lost.
- Oral language fluency is disrupted by repetitions, unusual pauses, and hesitations.

Students may have difficulty with:

- Expressing thoughts in an organized and detailed manner.
- Concepts involving time such as before, after, during, etc.
- Cause and effect relationships.
- Finding words when talking.
- Syntax and morphology.
- Logical sequencing of events.
- Multiple word meanings such as _____.
- Remembering information and repeating.
- Categorizing in verbal tasks.
- Remembering information and repeating.
- Processing and recall of critical information.
- Making simple inferences.
- Perceiving and producing complex word configurations.

Possible Indicators of Listening Comprehension Problems

Researchers in the field of speech and language disorders have identified the following characteristics of students who have listening comprehension problems. This list is meant to serve as a guide for discussion during the assessment process. If a student exhibits several of the following characteristics, assessment in the speech language area and/or in the area of listening comprehension may be needed.

Characteristics of Students with Listening Comprehension Problems

The student may:

- Have a delayed response time to questions, pauses for 2 seconds or more.
- Have a limited vocabulary.
- Give short incomplete, incorrect or inappropriate responses to questions.
- Not understand jokes.
- Need repetition before understanding a question or comment that is not particularly difficult.

The student may have difficulty with:

- Untangling relationships in more complex sentences.
- Remembering information and repeating information presented orally.
- Following oral directions.
- Processing and recall of critical information.
- Comprehension of basic vocabulary and concepts used in the classroom.
- Making simple inferences.
- Auditory memory and comprehension.
- Attention.
- Syntax and morphology.
- Multiple word meanings such as _____.
- Logical sequencing of events.
- Cause and effect relationships.
- Time concepts such as before, after, during, etc.

3.3.12 SLD Eligibility Documentation

Monitoring and Compliance Form

Student's Name _____ Building _____

Reviewer's Name _____

3.3.12 Specific Learning Disability

Assessment _____ Reassessment _____ Date of assessment _____

Federal Setting _____ DOB _____ ***Eligible:*** Yes No

A learner has a specific learning disability and is in need of special education and related services when the learner meets the criteria described in Items A, B, and C.

A. Documentation in report of severe underachievement **Yes** **No**

Evidence of low achievement from sources such as cumulative record reviews, classwork samples, anecdotal teacher records, formal D informal tests, curriculum based assessment results, and other support programs results

AND .... support data in assessment summary report includes relevant data from an observation in regular classroom setting by special education staff **Yes** **No**

AND

B. Documentation in report of severe discrepancy (-1.75 SD) **Yes** **No**

Cognitive Test Name _____ U _____ P _____ FS _____

Achievement Test Name _____ Regression Score _____

Broad/Cluster Scores: Reading SS _____ Math SS _____ Written Language SS _____

OR

Basic Reading Skills	SS _____	Reading Comprehension	SS _____
Math Calculation	SS _____	Math Reasoning	SS _____
Written Expression	SS _____	Listening Comprehension	SS _____
Oral Expression	SS _____		

*(*with any test, subtest scares alone cannot be used for discrepancy calculation)*

AND

C. Documentation in report of information processing condition **Yes** **No**

Interference with the acquisition, organization, storage, retrieval, manipulation or expression of information, such as:

- lack of organizational skills
- visual or auditory memory difficulties
- verbal or non-verbal expression difficulties
- inadequate or lack of expected acquisition of information
- spatial arrangements
- motor control
- correct use of development order in relating events

AND documentation in assessment summary report that disabling effects of information processing condition occurs in variety of settings **Yes** **No**

Parent information in assessment summary report for each *criteria* element **Yes** **No**

Statement that underachievement is not the result of other factors, such as vision, hearing, motor impairment, mental impairment, EBB, environmental, cultural or economic variables, or a history of inconsistent educational program **Yes** **No**

Any relevant medical findings **Yes** **No**

3.3.12 SLD Specific Learning Disability Form (continued)

Continuing Need for Service

Documentation shows need for continuing services
(Indicate those included in report.)

- ❑ Disability adversely affects performance
- ❑ Objective data used to determine need for service
- ❑ Current information on performance
- ❑ Demonstrated inability to succeed in general education
- ❑ Environmental assessment for level of performance needed for success without services

For complete information regarding eligibility requirements, refer to Minnesota Rule 3525.1341.

Contained in this Appendix

Definition of Statistical Terms

Normal Distribution Curve

Stanford-Binet Conversion Chart

Minnesota Regression Formula

Definition of Statistical Terms

Reliability Coefficients

Test-retest is an index of stability—also called the coefficient of stability.

Administer the same test on two occasions to determine test/retest.

Stability or reliability is affected by the time interval, individual's memory and item content.

Alternate form reliability, equivalent form, or parallel form reliability.

Administer two equivalent forms of the test to large sample which is divided in two parts. Scores from two forms are correlated.

These two samples should have the same means and variances and high reliability coefficient. Reliability is affected by time interval.

Internal consistency reliability

Split-half reliability based on scores obtained during one test administration. Split-half obtained by dividing the test into two equivalent halves; assign all odd numbered items or even numbered items.

Cronbach's coefficient alpha is a reliability coefficient for different scoring systems and is based on the variance of test scores and item scores.

Kuder-Richardson formula 20 is a special case of coefficient alpha useful for tests scored pass/fail. Obtained by calculating proportion of people who pass and fail each item and the variance of test scores.

Not appropriate for timed tests.

Size of internal consistency increases with length of test.

Factors affecting reliability

1. *Test length* — the more items, the more homogeneous the higher the reliability.
2. *Test-retest interval* — the smaller the time interval, the smaller the chance of change, the higher the reliability.
3. *Variability of scores* — the greater the variance of scores on a test the higher the reliability estimate. Small changes in performance have a greater impact on the reliability of a test when the range or spread of scores is narrow than when it is wide.

*Homogenous samples (with small variance) yield lower reliability estimates than heterogenous samples (large variance).

Definitions of Statistical Terms (cont.)

4. *Guessing* reliability is higher when there is less guessing or random responding.

5. *Variations within test situation* the reliability is higher when there are fewer variations in the testing situation.

    - misunderstood instructions
    - scoring errors
    - illness
    - daydreaming

Standard Error of Measurement SEM is the estimate of error attached to a person's score and is directly related to the reliability of these tests. The lower the reliability the higher the standard error.

The SEM is the standard deviation of the distribution of error scores.

SEM is computed from reliability coefficient by multiplying the standard deviation by the square root of 1 minus the reliability coefficient (rxx).

SEM = SD 1 – r xx

Validity — the extent to which a test measures what it is supposed to.

Content validity refers to when items on a test are representative of domain that the test purports to measure. Consider:

- appropriateness of item types
- completeness of item sample
- way in which items assess the content of domain

Criterion validity refers to the relationship between test scores and some type of criterion or outcome such as ratings, classifications or other test scores.

Two types of criterion validity are *concurrent (diagnostic) and predictive (prognostic).*

Concurrent validity refers to whether test scores are related to some currently available criterion measure, i.e., test scores correlate with teacher ratings.

Predictive validity refers to correlation between test scores and performance on a relevant criterion where there is a time interval between the test administration and performance on criterion.

Construct validity refers to the extent to which a test measures a psychological construct or trait.

Definitions of Statistical Terms (cont.)

Factors affecting validity

Predictive validity affected by:

1. *Test-related factors:* test taking skills, anxiety, motivation, speed, understanding of test instructions, degree of item format novelty, examiner-examinee rapport, physical handicap, bilingualism, deficiencies in educational opportunities, unfamiliarity with test.

2. *Criterion related factors:* school grades are affected by motivation, classroom behavior, personal appearance and study habits.

3. *Intervening events:* acute or chronic conditions, episodic events.

Factor analysis is a mathematical procedure to analyze intercorrelations of a group of tests.

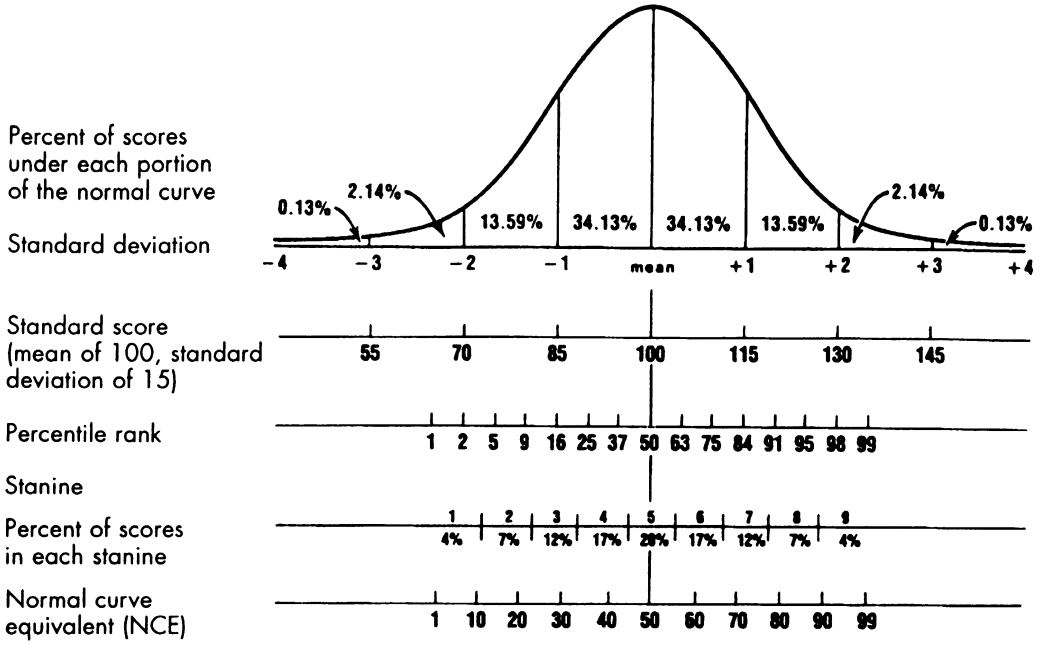
The major purpose of factor analysis is to simplify the description of behavior by reducing the number of variables to the smallest possible number.

Communality — the part of the total variance that can be attributed to common factors:

h = commonality of test
a = loading of test on factor 1, etc.

$h^2 = a_1^2 + a_2^2 + a_3^2 \quad \ldots\ldots$

The Normal Curve and Its Relationship to Various Derived Scores



Normal Distribution

For many kinds of tests, developers often make the assumption that individual test scores have an approximately bell-shaped, or normal, distribution. The figure above illustrates, for a normal distribution, the relationship between standard scores and other derived scores: percentile ranks, stanines, and normal curve equivalents.

Standard Scores

Standard scores are called deviation scores because they indicate the distance between an individual's score and the mean of the norm group in terms of standard deviation units.

Many psychological and educational instruments use a standard score scale with a mean of 100 and a standard deviation of 15. This common scale allows both basic score comparisons and more complex statistical analysis to be made.

Percentile Ranks

A percentile rank indicates the percentage of the norm group that below a specific raw score. Percentile ranks are easily explained and widely used. However, unlike standard scores, ranks are not on an equal-interval scale. Percentile ranks are clustered close together at the center of the normal distribution, and are spread more widely at the extremes. Because of this, there is a danger in attempting to interpret differences between percentile ranks. For example, the 10-point difference between the percentile ranks of 45 and 55 represents a smaller difference in the trait being measured than the 10-point difference between the percentile ranks of 85 and 95.

Stanines

The stanine ("standard nine") scale ranges from 1 to 9, with a mean of 5 and a standard deviation of about 2. Because it contains only 9 possible score points, the stanine scale does not provide a precise description of score levels. Stanines are commonly used in situations where fine discriminations among scores would not be appropriate.

Normal Curve Equivalents

The normal curve equivalent (NCE) scale divides the normal score distribution into 99 equal intervals. NCE scores range from 1 to 99, with a mean of 50 and a standard deviation of 21.06.

Standford-Binet Conversion Chart

Percentile Ranks for Deviation IQs and Composite Scores (Sattler, 19XX)

IQ	Percentile rank: WISC-R, WPPSI, WAIS-R (SD = 15)	Percentile rank: Stanford-Binet, McCarthy (SD = 16)	IQ	Percentile rank: WISC-R, WPPSI, WAIS-R (SD = 15)	Percentile rank: Stanford-Binet, McCarthy (SD = 16)	IQ	Percentile rank: WISC-R, WPPSII, WAIS-R (SD = 15)	Percentile rank: Stanford-Binet, McCarthy (SD = 16)
155	99.99	99.97	118	88	87	81	10	12
154	99.98	99.96	117	87	86	80	9	11
153	99-98	99.95	116	86	84	79	8	9
152	99.97	99.94	115	84	83	78	7	8
151	99.97	99.93	114	82	81	77	6	8
150	99.96	99.91	113	81	79	76	5	7
149	99.95	99.89	112	79	77	75	5	6
148	99.93	99.87	111	77	75	74	4	5
147	99.91	99.83	110	75	73	73	4	5
146	99.89	99.80	109	73	71	72	3	4
145	99.87	99.75	108	70	69	71	3	4
144	99.83	99.70	107	68	67	70	2	3
143	99.79	99.64	106	66	65	69	2	3
142	99.74	99.57	105	63	62	68	2	2
141	99.69	99	104	61	60	67	1	2
140	99.62	99	103	58	57	66	1	2
139	99.53	99	102	55	55	65	1	1
138	99	99	101	53	52	64	1	1
137	99	99	100	50	50	63	1	1
136	99	99	99	47	48	62	1	1
135	99	99	98	45′	45	61	.47	1
134	99	98	97	42	43	60	.38	1
133	99	98	96	39	40	59	.31	1
132	98	98	95	37	38	58	.26	.43
131	98	97	94	34	35	57	.21	.36
130	98	97	93	32	33	56	.17	.30
129	97	96	92	30	31	55	.13	.25
128	97	96	91	27	29	54	.11	.20
127	96	95	90	25	27	53	.09	.17
126	96	95	89	23	25	52	.07	.13
125	95	94	88	21	23	51	.05	.11
124	95	93	87	19	21	50	.04	.09
123	94	92	86	18	19	49	.03	.07
122	93	92	85	16	17	48	.03	.06
121	92	91	84	14	16	47	.02	.05
120	91	89	83	13	14	46	.02	.04
119	90	88	82	12	13	45	.01	.03

Note: This table can be used to convert standard scores on any test with a mean of 100 and a standard deviation of 15 or 16 to percentile ranks.

Minnesota Regression Formula

In order to provide the cutoff values tabled for an achievement test, a regression formula was chosen. Expected achievement scores were calculated for each IQ. The regression formula has the general form (Ferguson, 1966):

$$Y = r_{xy} \frac{S_y}{S_x} (IQ - \overline{x}) \div \overline{y}$$

where

Y = the expected achievement score for a given IQ score
r_{xy} = the IQ – achievement score correlation
S_y = the standard deviation of the achievement scores
$\overline{x}$ = the mean IQ
S_x = the standard deviation of the IQ scores
$\overline{y}$ = the mean achievement standard score

The next calculation in this discrepancy formula is to determine a significant (severe) deviation from the expected achievement score. This is accomplished by defining discrepancy in terms of standard deviation units from the expected achievement scores.

The average standard deviation can be determined without actually computing these values (scores) for each of the achievement distributions. With a large sample, the average standard deviation can be directly obtained from the equation for the standard error of estimate (measurement) (Blommers and Lindquist,1960):

$$SD_y \sqrt{1 - r_{xy}^2}$$

where

SD_y = the standard deviation of all of the achievement scores
r_{xy} = the IQ-achievement score correlation

For Minnesota criteria this value is $SD_y \sqrt{1 - r_{xy}^2}$ which is then multiplied by 1.75 (the criteria established in Minnesota rule) and subtracted from the expected achievement score resulting in achievement cutoff scores.

In absence of other correlation information the practice in the field has been to use the .62 correlation column in the Minnesota Regression Table. The .62 correlation column is closest to a .63 correlation. The estimate of .63 was obtained by accepting 70 percent of the theoretical limit of the true correlation as the correlation between ability and achievement. Seventy percent was chosen because it was found most accurate in predicting known correlation coefficients.