An annotated list of tests for assessing students' learning abilities is provided in this document. Each annotation contains information that helps the educator gauge the negative and positive aspects of the tests. Information useful in understanding intelligence quotient (IQ) subscores and their implications is included. The tests described are categorized as reading tests, a comprehensive psychoeducational test, critical thinking tests, language tests, mathematics tests, memory tests, and an intelligence test. Classification ratings for IQs on the Wechsler Adult Intelligence Scale--Revised (WAIS-R) and Slosson Scales, implications of low scores and instructional applications of the verbal and performance tests of the WAIS-R, and implications of low scores and recommended instructional strategies for the annotated tests are outlined. Also included are 10 possible criteria for diagnosing learning disabilities and high risk students. Finally, six recommendations to facilitate learning for learning disabled students are provided in the following areas: (1) advocacy; (2) priority scheduling; (3) academic support; (4) developmental classes; (5) supplementary instructional materials; and (6) modifications of general examinations. A 13-item list of references is included.
Going the Extra Mile:

Formal Diagnosis In The Learning Center

Marcia L. Laskey
Cardinal Stritch College
Ann Totoraitis
Alverno College
Since assessment is rapidly becoming an important means for evaluating students and often helps in determining what strategies will be most effective for teaching and learning, the following information should be helpful for educators who are involved in assessing student progress and performance.

The information in this article can be used as a guideline for evaluating individualized tests that can be used in learning centers or by individual educators to assess student's learning abilities, both weaknesses and strengths. The annotated list of tests was developed as a practical tool for quickly gauging the negative and positive elements of these tests. Also included is information useful in understanding IQ subscores and their implications. Finally, criteria for diagnosing Learning Disability students and some recommendations for assisting students academically conclude this article.
ANNOTATED TEST LIST

READING

**Woodcock Reading Mastery Tests Revised**

This test is an individually administered reading test which focuses on word recognition, word attack, word comprehension and passage comprehension. It gives the examiner a chance to see the student’s specific strengths and weaknesses.

**Positive**
- Facilitates educational planning and specific strategies

**Negative**
- The word comprehension and passage comprehension scores tend to be somewhat inflated
- Time consuming to administer

**Woodcock-Johnson Psycho-Educational Battery -- Part II**

The Woodcock-Johnson is an individually administered reading cluster. This cluster consists of word identification and passage comprehension. The cluster score converts to a grade equivalency score.

**Positive**
- Quick to Administer
- Quick to score
- Reveals a grade equivalency

**Negative**
- Not as thorough as the Woodcock Reading Mastery Test

**COMPREHENSIVE PSYCHO EDUCATIONAL TESTS**

**The Woodcock-Johnson Psycho-Educational Battery -- Part I (W-J P-E)**

The W-J P-E Battery is a wide-range comprehension set of tests for measuring cognitive ability and academic aptitudes.

The Cognitive Factor Cluster includes oral language, broad reasoning, perceptual speed & memory

The Scholastic Aptitude cluster includes a determination of reading aptitude, math aptitude, written language aptitude and knowledge aptitude.

**Positive**
- Gives a broad ability score
- Gives scholastic aptitudes

**Negative**
- Requires about an hour to administer
- Time-consuming to score
CRITICAL THINKING

**Cornell Critical Thinking Test -- Level Z**

The Cornell Critical thinking Test is a group or individual critical thinking tests designed to evaluate general critical thinking skills including induction, deduction, assumption identification, semantics, credibility and definitions.

<table>
<thead>
<tr>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple to score</td>
<td>Time consuming to administer</td>
</tr>
<tr>
<td>Reveals difficulties with reading and reasoning</td>
<td>Students find this test extremely challenging</td>
</tr>
</tbody>
</table>

**Watson-Glaser Critical Thinking Appraisal**

The Watson-Glaser Critical Thinking Appraisal is a group or individual standardized test designed to evaluate analytical and logical reasoning. The subtests are inferencing, recognition of assumptions, deduction and interpretation and evaluation of arguments.

<table>
<thead>
<tr>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple to score</td>
<td>40 minutes to administer</td>
</tr>
<tr>
<td>Reveals difficulties with reading and reasoning</td>
<td>Challenging</td>
</tr>
</tbody>
</table>

**LANGUAGE**

**Test of Written Language -- 2 (TOWL-2)**

The TOWL is an individual language test which gives the students' overall written language quotient including score for the students' contrived and spontaneous writing.

<table>
<thead>
<tr>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicates specific strengths and weaknesses</td>
<td>Subjective scoring</td>
</tr>
<tr>
<td>Thorough evaluation of English skills</td>
<td>Time consuming to administer and correct</td>
</tr>
</tbody>
</table>
Test of Adolescent Language (TOAL-2)

The TOAL is an individual language test which also includes an evaluation of the students' listening, reading and speaking skills.

**Positive**
- All encompassing evaluation of language skills including expressive and receptive language
- Eliminates subjective scoring
- Includes a spontaneous writing selection

**Negative**
- Very time consuming to correct and administer

MATH

Woodcock-Johnson Psycho-Educational Battery -- Part II. Math

The Woodcock-Johnson-Math is an individually administered math test which involves calculation and applied problems.

**Positive**
- Gives grade equivalents of math skills
- Quick to give and score

**Negative**
- Somewhat brief

Wide Range Achievement Test - Mathematics Subtest (WRAT)

The WRAT is a ten minute timed computation test, with grade equivalents which include elementary and high school levels.

**Positive**
- Quick to administer & score

**Negative**
- Penalizes the slow worker
- Difficult to complete in 10 minutes
MEMORY TESTS

Non-Verbal Selective Reminding Test

The Non-Verbal Selective Reminding Test is a normed individual memory test that measures visual long-term storage and retrieval.

**Positive**
- Quick to give

**Negative**
- Complicated to score

Selective Reminding Test

The Selective Reminding Test is a normed individual memory test that measures long-term verbal memory including storage and retrieval.

**Positive**
- Quick to give

**Negative**
- Complicated to score

INTELLIGENCE TEST

Wechsler Adult Intelligence Scale-Revised (WAIS-R)

The WAIS-R is an individually administered intelligence test that measures verbal and performance IQ. The subtests can be very informative as they reveal patterns of cognitive weaknesses and strengths.

**Positive**
- Can reveal learning disabilities
- Can reveal areas of cognitive difficulty
- Helpful in making educational decisions

**Negative**
- Requires administration by highly trained examiner
- Time consuming to administer and score
### Classification Ratings for IQ's on the Wechsler and Slosson Scales

#### WAIS-R

<table>
<thead>
<tr>
<th>IQ</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>130 and above</td>
<td>Very Superior</td>
</tr>
<tr>
<td>120-129</td>
<td>Superior</td>
</tr>
<tr>
<td>110-119</td>
<td>High Average</td>
</tr>
<tr>
<td>90-109</td>
<td>Average</td>
</tr>
<tr>
<td>80-89</td>
<td>Low Average</td>
</tr>
<tr>
<td>70-79</td>
<td>Borderline</td>
</tr>
<tr>
<td>69 and below</td>
<td>Mentally Deficient or Mentally Retarded</td>
</tr>
</tbody>
</table>

#### Slosson IQ Classification Chart

<table>
<thead>
<tr>
<th>IQ</th>
<th>Classification</th>
<th>School Accomplishment and Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>144-above</td>
<td>Gifted</td>
<td>Gifted programs, college, graduate work</td>
</tr>
<tr>
<td>133-143</td>
<td>Very Superior</td>
<td>Gifted classes, college, graduate work</td>
</tr>
<tr>
<td>120-132</td>
<td>Superior</td>
<td>Gifted classes, college, graduate work</td>
</tr>
<tr>
<td>110-119</td>
<td>High Average</td>
<td>High school, college</td>
</tr>
<tr>
<td>90-109</td>
<td>Average</td>
<td>High school, Junior college</td>
</tr>
<tr>
<td>80-89</td>
<td>Low Average</td>
<td>Slow learner classes, Vocational School</td>
</tr>
<tr>
<td>68-79</td>
<td>Borderline</td>
<td>Slow learner classes and classes for retarded</td>
</tr>
<tr>
<td>52-57</td>
<td>Mild Retardation</td>
<td>Classes for retarded (Educable)</td>
</tr>
<tr>
<td>36-51</td>
<td>Moderate Retardation</td>
<td>Classes for retarded (Trainable)</td>
</tr>
<tr>
<td>20-35</td>
<td>Severe Retardation</td>
<td>Trainability Questionable School Inclusion</td>
</tr>
<tr>
<td>Zero - 19</td>
<td>Profound Retardation</td>
<td>School Exclusion or untrainable</td>
</tr>
</tbody>
</table>
IMPLICATIONS OF LOW SCORES

AND

INSTRUCTIONAL APPLICATIONS

OF THE WAIS-R

Sub Test Information

Verbal Test

POSSIBLE IMPLICATIONS
OF LOW SCORES

INSTRUCTIONAL STRATEGIES

Information

Poor range of factual knowledge
Stress factual material through use of reading newspaper articles,
Poor range of information
discussing current events,
Poor memory
and doing memory exercises
Tendency to give up easily
Use enrichment activities
ESL background

Low achievement orientation

Pour conceptual thinking

Similarities

Difficulty in seeing relationships
Focus on recognition of differences and likeliness
Difficulty in selecting and
Use contrast/compare exercises
and verbalizing appropriate
relationships between two objects or concepts
Teach language development
Overly concrete mode of thinking
and exercises involving abstract words, classifications, and	specificity
Rigidity of thought processes
generalizations
'negativism'
Arithmetic

Inadequate ability in mental arithmetic
Poor concentration
Anxiety over a school-like task
Blocking toward mathematical tasks
Poor school achievement
Anxiety (e.g., worry over personal problems)

Develop basic arithmetic skills through use of practice and drills
Use concrete objects and actual problems to introduce concepts

Vocabulary

Poor word knowledge
Poor verbal comprehension
Poor verbal skills and language development
Limited educational or family background
Difficulty in verbalization
Foreign language background
Verbalization not encouraged in culture

Develop a working vocabulary through exercises in reading, speaking and writing
Use other verbal enrichment exercises i.e. crossword puzzles word games
Use 3x5 cards to increase knowledge of vocabulary
Learn words as concepts

Comprehension

Poor social judgment
Failure to take personal responsibility (e.g., overdependency, immaturity, limited involvement with others.)
Overly concrete thinking
Difficulty in expressing ideas
Creative individual looking for unusual solutions

Discuss and model the actions of others to help develop social awareness and social expectations
Employ role-play situations
Anxiety
Inattention
Distractibility
A possible learning deficit
Difficulty in auditory sequencing

POSSIBLE IMPLICATIONS
OF LOW SCORES

Anxiety affecting concentration and attention
Preoccupation with irrelevant details
Negativism ("nothing is missing")

Difficulty with visual organization (sequencing)
Difficulty in anticipating events and their consequences
Inattentiveness
Anxiety
Failure to use cues

Poor visual–motor–spatial integration
Visual–perceptual problems
Poor spatial orientation

Digit Span
Emphasize listening skills
Use oral sequencing activities
Use short and simple directions and repeat when necessary

Performance Test

INSTRUCTIONAL IMPLICATIONS

Picture Completion
Focus on visual learning techniques stressing individual parts that make up the whole
Use visual perceptual activities
Use visual study strategies such as mapping and charting

Picture Arrangement
Focus on cause and effect relationships and logical sequential presentations
Use writing assignments where students supply the end

Block Design
Use spatial–visual tasks and perceptual tasks involving breaking down an object and building it up again
Focus on part-to-whole relationships and working with a model or key
Visual-motor difficulties

Visual-perceptual problems

Poor planning ability

Difficulty in perceiving a whole

Minimal experience with construction tasks

Limited interest in assembly tasks

Limited persistence

Visual-motor coordination difficulties

Distractibility

Visual defects

Poor pencil control

Disinterest in a school-like task

Excessive concern for detail in reproducing symbols exactly

Lethargy

Object Assembly

Develop perceptual skills through guided practice in assembling parts into familiar configurations

Encourage trial-and-error activities

Focus on interpretation of wholes from minimal cues

Coding

Use visual-motor learning exercises, e.g., computer and video activities
IMPLICATIONS OF LOW SCORES
AND
RECOMMENDED INSTRUCTIONAL STRATEGIES
FOR ANNOTATED TESTS

POSSIBLE IMPLICATIONS OF
LOW SCORES

Woodcock Reading Mastery Revised

Test 1
Visual Auditory Learning

Not applicable to high school/college students.

Test 2
Letter Identification

Not applicable to high school/college students.

Test 3
Word Identification

Poor sight vocabulary
Dyseidetic
Poor memory
Limited cultural experience

Dysphonetic

Build schema
Use 3x5 cards for vocabulary development
Use whole language approach
Use the impress or echo method
Teach vocabulary through context
Use echo system to enhance pronunciation
Teach word relationships

Test 4
Word Attack

Poor critical thinking skills
Poor vocabulary knowledge
Possible lack of strong cognitive ability
Poor schema

Build schema
Build vocabulary through use of concepts
Develop critical thinking skills
Place students in developmental reading course
Teach word relationships

Test 5
Word Comprehension
### Test 6
**Passage Comprehension**

<table>
<thead>
<tr>
<th>Lacks context skills</th>
<th>Teach context skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor comprehension</td>
<td>Build comprehension skills</td>
</tr>
<tr>
<td>Slow reading speed</td>
<td>Place students in developmental courses</td>
</tr>
</tbody>
</table>

### Woodcock–Johnson Psycho–Educational Battery—part II

<table>
<thead>
<tr>
<th>Poor basic math skills</th>
<th>Placement in a remedial math class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor memory</td>
<td>Participate in a tutorial</td>
</tr>
<tr>
<td>Test anxiety</td>
<td>Review of basic math skills</td>
</tr>
<tr>
<td></td>
<td>Get affective support</td>
</tr>
</tbody>
</table>

### Woodcock–Johnson Psycho–Educational Battery—part I

<table>
<thead>
<tr>
<th>Discrepancies between cognitive factor clusters</th>
<th>Placement in exceptional education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low verbal ability scores</td>
<td>Develop oral listening vocabulary and speaking vocabulary</td>
</tr>
<tr>
<td>Low reasoning cluster scores</td>
<td>Teach step-by-step basic reasoning processes, can be incorporated into reading comprehension activities</td>
</tr>
<tr>
<td>Low memory cluster scores</td>
<td>Teach techniques for developing memory, i.e. focusing, chunking new information, reviewing information</td>
</tr>
</tbody>
</table>

### Cornell Critical Thinking Test and Watson–Glaser Critical Thinking Appraisal

<table>
<thead>
<tr>
<th>Poor comprehension</th>
<th>Teach inductive and deductive reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lacks critical thinking skills</td>
<td>Teach inferencing skills</td>
</tr>
<tr>
<td>Poor inferencing skills</td>
<td>Place student in developmental reading class</td>
</tr>
<tr>
<td></td>
<td>Teach word relationships</td>
</tr>
</tbody>
</table>

Laskey and Totoraitis
Going the Extra Mile
Test of Written Language-2

Low contrived writing score

Low spontaneous writing score

Test of Adolescent Language-2

Low scores in listening vocabulary

Low listening grammar

Low speaking vocabulary and speaking grammar

Review spelling

Teach basic rules of punctuation and capitalization

Practice writing simple logical sentences

Progress to more complex sentences writing and combining

Encourage and reinforce the act of writing

Present students with open-ended questions to be developed

Provide numerous opportunities for the student to do expository and creative writing

Help student to develop sentence building strategies; then develop these into cohesive paragraphs

Give practice exercises where students must listen, take notes and then answer questions based on newly learned information

Give students opportunity to present expository information and then question classmates

Encourage students to give oral presentations

Teach basic reading comprehension strategies, i.e. K-W-L, etc.

Review spelling

Teach basic rules of punctuation and capitalization

Practice writing simple logical sentences
<table>
<thead>
<tr>
<th>Low reading vocabulary and reading grammar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low writing vocabulary and writing grammar</td>
</tr>
</tbody>
</table>

| Progress to more complex sentences writing and combining |
| Encourage and reinforce the act of writing |
| Present students with open-ended questions to be developed |
| Provide numerous opportunities for the student to do expository and creative writing |
| Help student to develop sentence building strategies; then develop these into cohesive paragraphs |

<table>
<thead>
<tr>
<th><strong>Wide Range Achievement Test—Level 2—Math</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor basic math skills</td>
</tr>
<tr>
<td>Poor memory</td>
</tr>
<tr>
<td>Test anxiety</td>
</tr>
</tbody>
</table>

| Placement in a remedial math class |
| Participate in a tutorial |
| Review of basic math skills |
| Get affective support |
| Read text orally |
| Join study groups |
| Use 3x5 cards for short amount of information and vocabulary words |

<table>
<thead>
<tr>
<th><strong>Nonverbal Selective Reminding Test (visual)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty with remembering printed material</td>
</tr>
<tr>
<td>Limited vocabulary</td>
</tr>
<tr>
<td>Lack of visual learning strategies</td>
</tr>
<tr>
<td>Participate in talking books</td>
</tr>
</tbody>
</table>

| Tape record lectures |
| Teach visual strategies as cues to retrieval of information |
| Focus on reading more than lecture |
| Focus on instructor's visual cues—blackboard, overheads, etc. |

<table>
<thead>
<tr>
<th><strong>Selective Reminding Test (auditory)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor auditory memory</td>
</tr>
<tr>
<td>Limited retrieval strategies</td>
</tr>
<tr>
<td>Poor retention</td>
</tr>
<tr>
<td>Difficulty with test taking</td>
</tr>
</tbody>
</table>

| Place students in remedial or regular class |
| Participate in tutorial |
| Review of basic math skills |
| Get affective support |
| Placement in a remedial math class |
| Participate in a tutorial |
| Review of basic math skills |
| Get affective support |
POSSIBLE CRITERIA FOR DIAGNOSING LEARNING DISABILITY AND HIGH RISK STUDENTS

1. Full scale I.Q. score Wechsler Adult Intelligence Scale-Revised (WAIS-R) within the average range or high-low average range
2. One or more standard deviations between the verbal and the performance of the WAIS-R
3. Wide disparity between sub scores on the WAIS-R
4. Uncommon errors on informal/formal written exercises especially when the errors are inconsistent with the persons given abilities, i.e. phonetic spelling at an adult age
5. Low percentile scores, as compared to ability level in reading, when an appropriate amount of time was spent taking the test
6. Previously diagnosed as a LD in elementary/secondary school
7. More than one standard deviation away from the mean on memory tests, i.e. Selective Reminding or memory subtest on the Woodcock Johnson
8. Having a confirmed diagnosis as Dyslexic when evaluated by a competent diagnostician
9. Weak high school transcript
10. Poor self perception of academic skills

RECOMMENDATIONS to FACILITATE LEARNING for the LEARNING DISABLED STUDENT

1. Advocacy
   The first goal for the learning disabled student is to understand their specific academic needs and to relay them to professors and academic support staff.

2. Priority Scheduling
   Students who are learning disabled need to be given first priority when scheduling classes. A schedule should be flexible and reflect the student's needs, for example, placement in smaller classes and lighter academic load.

3. Academic Support
   Tutoring-peer/professional, paired learning, study groups. Various types of academic support should be made available to the learning disabled student.
4. **Developmental Classes**
   Developmental classes are designed to build and reinforce basic skills, enhance background knowledge and through repetition and practice, prepare the learning disabled student to enter higher level courses. These may include reading, study skills, math and English.

5. **Supplementary Instructional Materials**
   Taped textbooks, talking books, video taped classes, class outlines

6. **General Exam Modifications**
   Specific adjustments for testing often are necessary and can include oral exams, extended time, and/or a reader.
REFERENCE LIST


