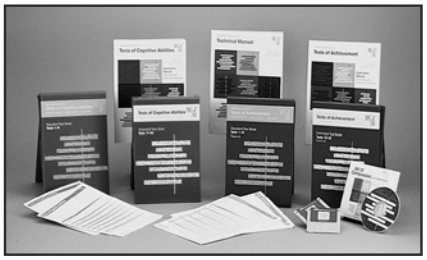
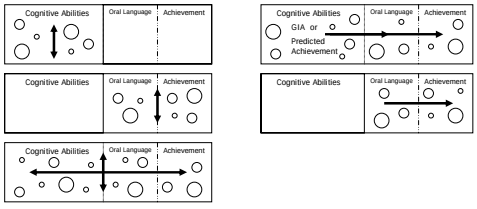
Part 2: WJ III Interpretation



Use and Interpretation of the WJ III Discrepancies

Discrepancy Procedures

Intra-Ability	Ability/Achievement
• Intra-Cognitive • Intra-Achievement • Intra-Individual	• GIA (STD or EXT) • Predicted Achievement • Oral Language Ability



Diagnose

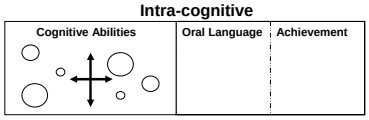
Identify Strengths & Weaknesses

Early Identification

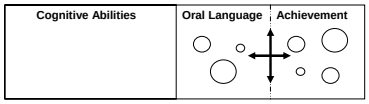
Program Planning

Intra-Ability Discrepancy Procedures

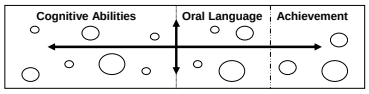
Intra-cognitive



Intra-achievement



Intra-individual



Intra-Cognitive Discrepancies

Requires 14 tests (1-7 & 11-17)

DISCREPANCIES	STANDARD SCORES Actual	Predicted	Difference	DISCREPANCY PR	SD	Significant at + or - 1.50 SD (SEE)
Intra-Cognitive						
COMP-KNOWLEDGE (Gc)	*122*	*93*	*+29*	*99*	*+2.48*	*Yes*
L-T RETRIEVAL (Glr)	*77*	*100*	*-23*	*4*	*-1.76*	*Yes*
VIS-SPATIAL THINK (Gv)	*120*	*96*	*+24*	*96*	*+1.79*	*Yes*
AUDITORY PROCESS (Ga)	*79*	*100*	*-21*	*6*	*-1.57*	*Yes*
FLUID REASONING (Gf)	*105*	*95*	*+10*	*81*	*+0.86*	*No*
PROCESS SPEED (Gs)	*104*	*97*	*+7*	*70*	*+0.52*	*No*
SHORT-TERM MEM (Gsm)	*68*	*101*	*-33*	*0.5*	*-2.56*	*Yes*

Strengths: **Comprehension-Knowledge, Visual-Spatial Thinking**

Weaknesses: **Long-Term Retrieval, Auditory Processing, Short-Term Memory**

Discrepancy Percentile Ranks

Reflects the percent of the population that has performance as high as, the same as, or as low as the individual. (*Based on age or grade mates with same predicted score.)*

DISCREPANCIES	STANDARD SCORES Actual	Predicted	Difference	DISCREPANCY PR	SD	Significant at + or - 1.50 SD (SEE)
Intra-Achievement						
BASIC WRITING SKILLS	*74*	*100*	*-26*	*1*	*-2.41*	*Yes*

In Basic Writing Skills, only 1 out of 100 grade mates with the same predicted score, would obtain a standard score of 74 or lower.

DISCREPANCIES	STANDARD SCORES Actual	Predicted	Difference	DISCREPANCY PR	SD	Significant at + or - 1.50 SD (SEE)
Intra-Cognitive						
SHORT-TERM MEMORY	*68*	*101*	*-33*	*.5*	*-2.56*	*Yes*

Angelina's discrepancy percentile rank (PR: .5) indicates that only 5 in 1000 age mates with the same predicted score would obtain a Short-Term Memory score (SS: 68) the same or lower.

Intra-Individual Discrepancies

DISCREPANCIES Intra Individual	STANDARD SCORES Actual	Predicted	Difference	DISCREPANCY PR	SD	Significant at + or - 1.50 SD (SEE)	
COMP KNOWLEDGE (Gc)	122	96	+26	99.6	+2.62	Yes	COG
L-T RETRIEVAL (Glr)	77	100	-23	5	-1.62	Yes	
VIS SPATIAL THINK (Gv)	120	98	+22	94	+1.53	Yes	
AUDITORY PROCESS (Ga)	79	100	-21	7	-1.50	Yes	
FLUID REASONING (Gf)	105	98	+7	72	+0.59	No	
PROCESS SPEED (Gs)	104	98	+6	65	+0.40	No	
SHORT TERM MEM (Gsm)	68	100	-32	1	-2.38	Yes	
PHONEMIC AWARE	71	100	-29	2	-2.09	Yes	
WORKING MEMORY	76	100	-24	2	-1.97	Yes	
BASIC READING SKILLS	74	100	-26	0.3	-2.74	Yes	ACH
READING COMP	94	98	-4	33	-0.45	No	
MATH CALC SKILLS	107	98	+9	77	+0.73	No	
MATH REASONING	117	97	+20	97	+1.94	Yes	
BASIC WRITING SKILLS	74	100	-26	1	-2.41	Yes	
WRITTEN EXPRESSION	92	99	-7	30	-0.53	No	
ORAL EXPRESSION	112	98	+14	89	+1.20	No	
LISTENING COMP	102	98	+4	65	- 0.39	No	
ACADEMIC KNOWLEDGE	125	97	+28	99.6	+2.65	Yes	

Predict present performance levels based on three different measures:

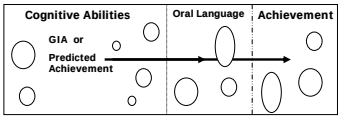
GIA score

Predicted ACH score

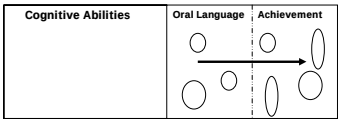
Oral Language-Extended score (in the WJ III ACH)

Ability/Achievement Discrepancy Procedures

GIA or Predicted ACH to Achievement



Oral Language to Achievement

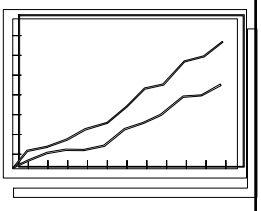


Ability-Achievement Discrepancies

Most states required a discrepancy between intellectual potential and achievement for LD

Intelligence test results represent predicted success

Achievement test results represent actual school performance



Variability

States vary from a low of 2.10% (Georgia) to over 7% (Massachusetts).

Lack of objective procedures for identification.

...the criterion set for the size of discrepancy that counts as a reading or writing disability is always arbitrary and varies widely among states and among schools within states. (pp.158-159)

Whether a child is or is not diagnosed as learning disabled depends on the state and the local criteria where a child lives or on the personal philosophy of an independent evaluator who assesses the child. (p. 164)

Source: Berninger, V. W. (1996). *Reading and writing acquisition: A developmental neuropsychological perspective.* Boulder, CO: Westview Press.

An ability- achievement discrepancy is no longer required.

"(6) SPECIFIC LEARNING DISABILITIES.—

"(A) IN GENERAL.—Notwithstanding section 607(b), when determining whether a child has a specific learning disability as defined in section 602, a local educational agency shall not be required to take into consideration whether a child has a severe discrepancy between achievement and intellectual ability in oral expression, listening comprehension, written expression, basic reading skill, reading comprehension, mathematical calculation, or mathematical reasoning.

"(B) ADDITIONAL AUTHORITY.—In determining whether a child has a specific learning disability, a local educational agency may use a process that determines if the child responds to scientific, research-based intervention as a part of the evaluation procedures described in paragraphs (2) and (3).

Response to Intervention (RTI)

Provides early intervention.

May reduce the number of referrals.

Attempts to provide all students with adequate interventions.

Helps monitor the progress of all students.

RTI does not…

Classify

Individualize

Diagnose

What Does RTI Mean for…

Reading comprehension

Math problem solving

Written expression

Content area learning

Upper elementary and secondary students

"When I was working as a school psychologist some 50 years ago and received a referral from a teacher about a child who was having trouble learning, the very first thing I did was to visit the teacher to inquire about the problem. I wanted to know what the child was having trouble with. I wanted to know what the teacher had tried that did not work and most importantly, I wanted to know what had been done that had worked.

At that time I had never heard of Response to Intervention (RTI) and I certainly would not have predicted that there were going to be initials to describe what has always been good practice, as a 'new' procedure" (p. 151).

Source: Zach, L. J. (2005). Déjà vu all over again: The current controversy over the identification of learning disability. *The School Psychologist, 59*, 151-155.

Specific Learning Disability

"The term 'specific learning disability" means a disorder in 1 or more of the basic psychological processes involved in understanding or using language, spoken or written, which disorder may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations." (20 USCS § 1401, 2005)

The biggest discrepancy that exists is between the LD definition and how we operationalize it.

Sources:

Hale, J. B., Naglieri, J. A., Kaufman, A. S., & Kavale, K. A. (2004). Specific learning disability classification in the new Individuals with Disabilities Education Act: The Danger of Good Ideas. *The School Psychologist, 58 (1),* 6-13, 29.

Kavale, K. A., Kaufman, A. S., Naglieri, J. A., & Hale, J. B. (2005). Changing procedures for identifying learning disabilities: The danger of poorly supported ideas. *The School Psychologist, 59 (1),* 16-25.

Using Oral Language-Ext as the Ability Measure

Determine if oral language is above or similar to academic performance.

Assumption is that verbal abilities and listening comprehension should be similar to reading and writing performance.

If both are low, direct intervention to all aspects of language. If only reading or writing is low, direct intervention to reading and/or writing.

Can use to provide a justification for an accommodation (e.g., books on tape, oral exams).

In summary, by adopting verbal IQ as an aptitude measure, we would be closer to a principled definition of potential in the reading domain, that is, the academic level that would result from instruction if the person's dysfunction were totally remediated. (p. 290)

Source: Stanovich, K. E. (1991).The construct validity of discrepancy definitions of reading disability.

DISCREPANCIES	STANDARD SCORES Actual	Predicted	Difference	DISCREPANCY PR	SD	Significant at + or - 1.50 SD (SEE)
*Oral Language/Achievement Discrepancies**						
BROAD READING	119	116	+3	58	+0.20	No
BASIC READING SKILLS	112	117	-5	36	-0.36	No
READING COMP	129	118	+11	80	+0.85	No
BROAD MATH	109	116	-7	30	-0.53	No
MATH CALC SKILLS	101	112	-11	23	-0.73	No
MATH REASONING	116	119	-3	40	-0.27	No
BROAD WRITTEN LANG	81	117	-36	0.3	-2.71	Yes
BASIC WRITING SKILLS	81	115	-34	1	-2.45	Yes
WRITTEN EXPRESSION	91	113	-22	5	-1.61	Yes
ACADEMIC KNOWLEDGE	127	121	+6	70	+0.54	No

*These discrepancies based on Oral Language (Ext) with ACH Broad, Basic, and Applied clusters.

Spence T., Grade 4

DISCREPANCIES	STANDARD SCORES Actual	Predicted	Difference	DISCREPANCY PR	SD	Significant at + or - 1.50 SD (SEE)
*Oral Language/Achievement Discrepancies**						
BROAD READING	82	84	-2	45	-0.12	No
BASIC READING SKILLS	90	83	+7	68	+0.47	No
READING COMP	68	81	-13	17	-0.95	No
BROAD MATH	78	84	-6	32	-0.46	No
MATH CALC SKILLS	87	88	-1	47	-0.08	No
MATH REASONING	69	80	-11	18	-0.92	No
BROAD WRITTEN LANG	79	82	-3	39	-0.27	No
BASIC WRITING SKILLS	86	84	+2	56	+0.15	No
WRITTEN EXPRESSION	73	86	-13	16	-0.98	No
ACADEMIC KNOWLEDGE	66	78	-12	12	-1.20	No

**These discrepancies based on Oral Language (Ext) with ACH Broad, Basic, and Applied clusters.*

Stacey, Grade 5

Concern

Overlooking or downplaying significant cognitive processing problems when significant ability-achievement discrepancies are not present or when a student responds somewhat to intervention.

The consensus of 10 (11) professional organizations that composed the U. S. Department of Education (2002, 2005) LD Roundtable indicated: “the identification of a core cognitive deficit, or a disorder in one or more psychological processes, that is predictive of an imperfect ability to learn is a marker for a specific learning disability.”

Source: Learning Disabilities Roundtable. (2002, 2005 July). *Specific learning disabilities: Finding common ground.* Washington, DC: American Institutes for Research. Retrieved from: http://www.ncld.org/advocacy/Common Ground.doc

"….(a) major value of detecting severe discrepancies within and between areas of cognition is the focus on cognitive processing components of learning disabilities."

(Brackett & McPherson, 1996)

College students with LD scored lowest on the following cognitive clusters:

Cognitive Efficiency

Auditory Processing

Phonemic Awareness

Working Memory

Did not differ from others on measures of Comprehension-Knowledge.

CHC CFA of WJ-III, WAIS-III, WMS-III and KAIT- University Students with and without LD
(McGrew, Gregg, Hoy, Stennett, Davis, Knight, Coleman & Ford, 2001)

Processing Speed

Ability to process symbols rapidly Visual scanning efficiency

WJ III Visual Matching

WISC-IV Coding

Cody's WJ III Scores CA 7-8, Grade 1.6

Long-Term Retrieval	***114***
Short-Term Memory	***102***
Processing Speed	***57***
Auditory Processing	***80***
Visual Processing	***107***
Comprehension-Knowledge	***122***
Oral Language	***143***
Broad Reading (Grade norms)	***103***
Broad Reading (Age norms)	***78***

Concern : Failure to Recognize that Smart People Can Have Learning Disabilities

People can have scores in the average range on the WJ III, and still have learning disabilities.

One has to consider:

Educational history

Educational opportunities

How the person functions on a daily basis

Scatter and Discrepancies

- Comment: Many commenters stated that the elimination of discrepancy models would result in an inability to identify children with SLD who are gifted. One commenter stated that a scatter of scores should be used to identify children with SLD who are gifted.
- Discussion: Discrepancy models are not essential for identifying children with SLD who are gifted. However, the regulations clearly allow discrepancies in achievement domains, typical of children with SLD who are gifted, to be used to identify children with SLD.

Justin's Intra-Achievement Discrepancies

DISCREPANCIES *Intra-Achievement*	STANDARD SCORES Actual	Predicted	Difference	DISCREPANCY PR	SD	Significant at + or - 1.50 SD (SEE)
BASIC READING SKILLS	74	103	-29	<0.1	-3.28	Yes
READING COMP	94	100	-6	26	-0.63	No
MATH CALC SKILLS	107	99	+8	73	+0.62	No
MATH REASONING	117	98	+19	97	+1.87	Yes
BASIC WRITING SKILLS	74	103	-29	0.3	-2.74	Yes
WRITTEN EXPRESSION	92	100	-8	24	-0.71	No
ORAL EXPRESSION	112	99	+13	86	+1.10	No
LISTENING COMP	102	99	+3	59	+0.24	No
ACADEMIC KNOWLEDGE	125	97	+28	99.5	+2.60	Yes

List Strengths:

List Weaknesses:

Concern

Over-relying on broad-based scores (e.g., cluster scores) and not looking at the different narrow abilities that comprise the score.

Broad Reading Cluster

- Letter-Word Identification (measures accuracy of letter and word recognition)
- Reading Fluency (measures reading rate with simple comprehension demands) (timed)
- Passage Comprehension (measures ability to use syntactic and semantic clues when reading short passages)

Letter-Word Identification

Reading decoding

Ability to identify printed letters and words

Not a test of automaticity

Decoding strategies are allowed

Word must be pronounced as the whole, correct word on the final trial

because

knew

own

whole

against

sentence

island

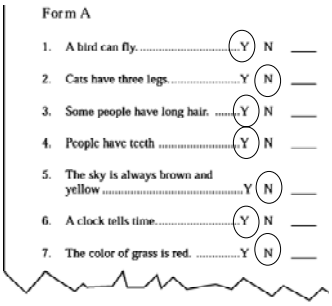
decide

Reading Fluency

Reading speed

Ability to comprehend simple sentences rapidly.

Person reads for three minutes.



Form A

1. A bird can fly. ..... (Y) N ___
2. Cats have three legs. ..... Y (N) ___
3. Some people have long hair. ..... (Y) N ___
4. People have teeth ..... (Y) N ___
5. The sky is always brown and yellow ..... Y (N) ___
6. A clock tells time. ..... (Y) N ___
7. The color of grass is red. ..... Y (N) ___

Passage Comprehension

Reading comprehension

Ability to understand and reason with context-embedded stimuli

Must supply the word that goes in the blank

Something is on the chair.
It is a _____.

It is one thing to demonstrate that modern war is harmful to the species. It is another thing to do something about _____ it.

Intra-Ability Discrepancies

"Because each test in a battery examines a different function, ability, skill, or combination thereof, the test taker's performance can be understood best when scores are not combined or aggregated, but rather when each score is interpreted within the context of all other scores and assessment data. For example, low scores on timed tests alert the examiner to slowed responding as a problem that may not be apparent if scores on different kinds of tests are combined."

Standards for Educational and Psychological Testing

Cross-Academic Clusters

	Tests from Standard Battery	Total Achievement	Academic Skills	Academic Fluency	Academic Applications
Reading	Letter-Word Identification	✓	✓		
	Reading Fluency	✓		✓	
	Passage Comp.	✓			✓
Math	Calculation	✓	✓		
	Math Fluency	✓		✓	
	Applied Problems	✓			✓
Written Language	Spelling	✓	✓		
	Writing Fluency	✓		✓	
	Writing Samples	✓			✓

Cross-Academic Clusters

Academic Skills: measures of basic skills

Academic Fluency: measures of rate and automaticity with controlled difficulty levels

Academic Applications: measures involving reasoning and the application of knowledge

CROSS-ACADEMIC

Cluster	GE	RPI	PR	SS
ACADEMIC SKILLS	2.7	19/90	4	74
ACADEMIC FLUENCY	3.9	75/90	27	91
ACADEMIC APPLICATIONS	5.5	92/90	61	104

WJ III Academic Fluency Cluster was the single most important variable in differentiating between college students with and without learning disabilities

CHC CFA of WJ-III, WAIS-III, WMS-III and KAIT- University Students with and without LD
(McGrew, Gregg, Hoy, Stennett, Davis, Knight, Coleman & Ford, 2001)

Concern: Not coming up with appropriate, specific accommodations and recommendations for a student.

Diagnosis and Instruction

Diagnosis must take *second* place to instruction, and must be made a *tool of instruction*, not an end in itself.

Source:

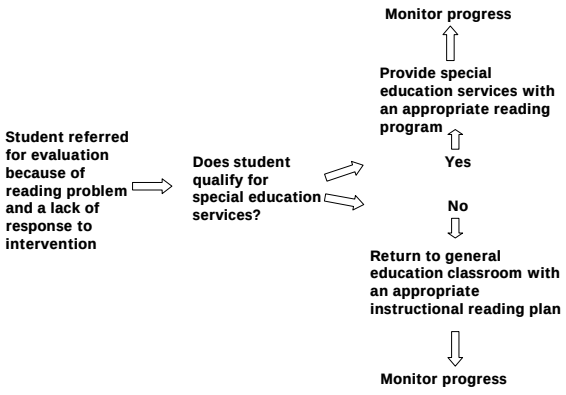
Cruickshank, W.M. (1977). Least-restrictive placement: Administrative wishful thinking. JLD, 10, 193-194.

Assessment Goals

- What does the student do well?
- Why is the student having difficulty in learning?
- What are the specific factors that affect learning?
- What are the necessary accommodations and interventions?

Answer the referral question…

- refer to other professionals
- request for more targeted assessment (e.g., speech-language evaluation)
- specify the accommodations and interventions that will be implemented
- delineate procedures for monitoring progress



Concern: Ignoring data or not integrating information from other tests

WISC-IV Composite Scores

FSIQ SS=100	Average
Verbal Comprehension SS=119	High Average
Perceptual Reasoning SS=106	Average
Working Memory SS=94	Average
Processing Speed SS=70	Borderline

Accommodations

- Minimize copying activities.
- Do not penalize for difficulty with basic writing skills.
- Provide additional time or shortened assignments on writing tasks.
- Continue use of the AlphaSmart.

Recommendations

- Capitalize on advanced oral language abilities and artistic talent
- Consult with OT/PT about fine- and gross-motor development.
- Administer diagnostic math assessment to identify areas for instruction.
- Provide systematic keyboarding instruction.
- Provide direct instruction and practice with punctuation and capitalization rules.
- Review/practice correct formation of *C, J, & 7*

Cross Academic Clusters

Considerations for IEPs

and 504 Plans

Skills < Fluency and Application
Do not penalize for poor skills

Fluency/rate < Skills and Application
Extend Time
Shorten Assignments

Applications < Skills and Fluency
Modify instructional level

Concern: Over-reliance on test scores rather than using clinical judgment

"The key to preventing further over-identification and mis-identification is to exercise trained professional judgment. Our widespread reluctance to use this essential professional judgment in determining eligibility has been due not only to the eligibility teams' lack of experience, but also to a fear that courts expect objective quantification as the sole or major basis for decision making.

Nothing could be further from the truth. The courts show the highest respect for professional judgment, originally of medical doctors and now of most other qualified experts, too."

Source: Bateman, B. (1992). Learning Disabilities: The changing landscape. JLD, 25, 29-36.