

TKB Before “Class” Starts...

- Make sure your foldables are filled in Day 1 -Day 3. Review with your Core Group or Chat Chum.
- Jack will show you how to score your student the CAS Rating Scale later this morning after Successive Processing.

Growth Mindsets Sesame Street

- Add video

Think Smart : Using Mindsets and Metacognition for Student Success - **DAY 4**

Successive Processing

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Research Professor, University of Virginia &
Devereux Center for Resilient Children

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International Educational Consultant,
Infinite Horizons

Think smart and
follow the sequence!

1 2 3

Follow
the order.

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TKB: Your Final Project

➤ **HAVE FUN** using the **notes from your foldables**, and working with your core group, come up with a **3 minute presentation** that summarizes the **big ideas** of what you have learned in this Summer Institute.

- Song/Rap/Poem
- Skit or Video
- Art Project
- Chart/Graph
- Your Choice



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TKB Party Animals!



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It's all in the Lobe!

- Planning =
 - Metacognition=
 - Self Regulation=
 - Executive Function=
- THINK SMART**



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Here's Where We're Going...

- Introduction/Routines and Procedures
- PASS & Learning
 - Attention & Instruction
 - Simultaneous & Instruction
- How to Start a Movement
- Closing Thoughts



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How to Start a Movement...

- Add video

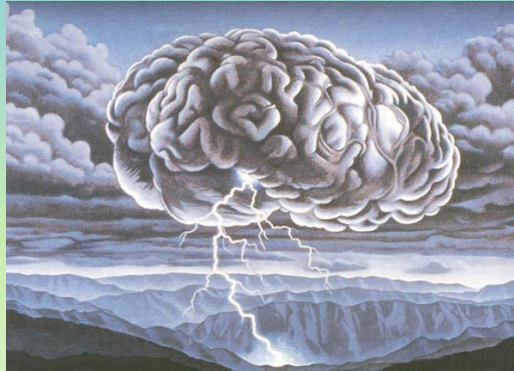
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Start a Movement: It's Organic!

- Meet at lunch.
- We will all talk and brainstorm ideas together.



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PASS Theory: Attention

Examples of classroom problems related to Attention

- Trouble focusing on what is important
- Difficulty resisting distractions
- Difficulty working on the same task for very long
- Unable to see all the details
- Providing incomplete or partially wrong answers

Naglieri, J. and Pickering, E., Helping Children Learn, 2003

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ATTENTION CASE STUDY: FRANKIE



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Frankie – Attention CW

- Referred by parents (at age 11) after a history of reading difficulties and self esteem problems
- Cognitive Assessment System
- WJ-R, WRAT-3, PPVT-III
- Behavioral/Emotional
 - Devereux Scales of Mental Disorders
- Self Concept
 - Bracken Multidimensional Self Concept Scale



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Frankie

➤ High level of anxiety

- he was too anxious to look closely at the words, and he would rather get the task completed and move on.
- Frankie could not attend to the details of the sequence of letters for correct spelling, and the order of sound-symbol associations



Figure 3.4. Frankie's self-portrait.

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Frankie

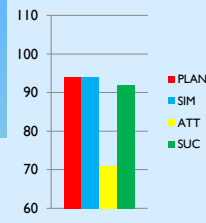
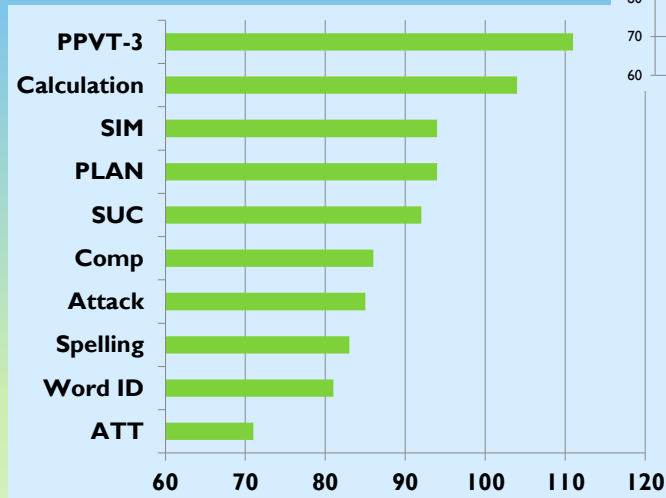
Tests	Score	%tile
Letter-Word Id	81	10
Passage Comp	86	17
Word Attack	85	16
Spelling	83	13
Calculation	104	60
PPVT-III	111	82

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Frankie

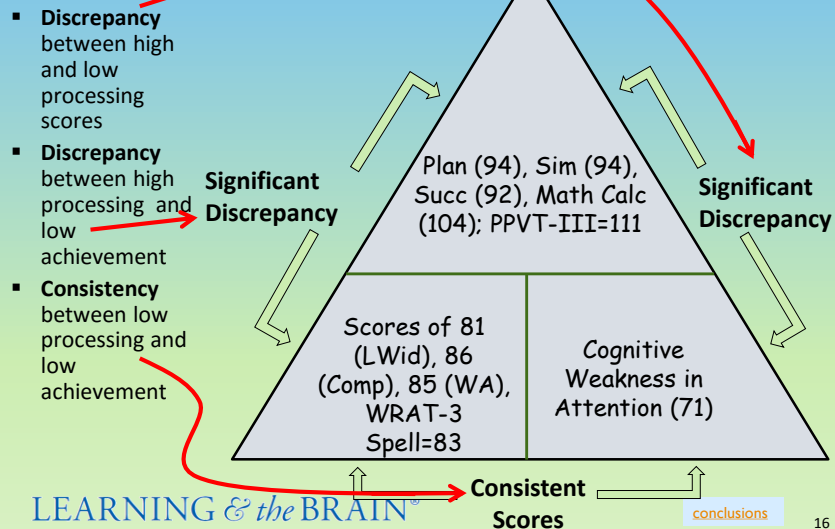


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Frankie Discrepancy Consistency Results



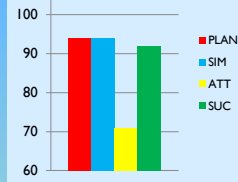
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Frankie

- Frankie has weaknesses in Attention & achievement which are consistent with Inattentive Type of ADHD and:



ED.gov U.S. Department of Education
Promoting educational excellence for all Americans

Browse Major Topics

- Alignment with the No Child Left Behind Act
- Discipline
- Disproportionality
- Early Intervening Services (EIS)
- Evaluation and Reevaluation
- Funding
- Highly Qualified

Regulations: Part [300](#) / [A](#) / [300.8](#) / [c](#) / [9](#)

(9) Other health impairment means having limited strength, vitality, or alertness, including a heightened alertness to environmental stimuli, that results in limited alertness with respect to the educational environment, that--

(i) Is due to chronic or acute health problems such as asthma, attention deficit disorder or attention deficit hyperactivity disorder, diabetes, epilepsy, a heart condition, hemophilia, lead poisoning, leukemia, nephritis, rheumatic fever, sickle cell anemia, and Tourette syndrome; and

(ii) Adversely affects a child's educational performance.

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Think and Talk



&



What would you recommend as possible interventions for Frankie's attention challenges?

NOTE: STOP AND TALK is important because the brain retains 50% through talk.

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Intervention Protocol

- Help child understand their PASS strengths and areas of challenges (**Intentional & Transparent**)
- Encourage Motivation & Persistence (**Mindsets**)
- Teach/Stress strategies for approaching tasks (**Skill Sets**)
 - Student generated
 - Model and Scaffold as needed
- Encourage independence and self efficacy (**Metacognition/Self Assessment**)

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What Should Teachers & Parents do?

How to Teach Students to Attend



Figure 1. A graphic that reminds students to focus on information being discussed.

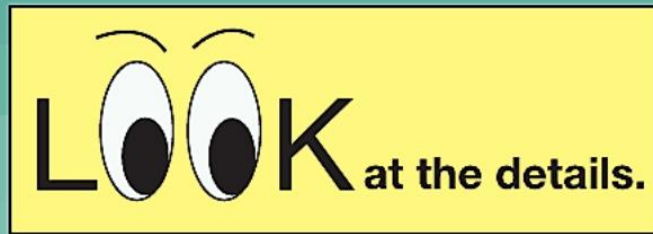
The first step in teaching children about their own abilities is to explain that they have many different types of abilities and that Attention is one of them. They also need to be aware of when their attention is focused and they are resisting distractions, as well as when it is divided among too many things, which leaves them unfocused and overloaded. In Figure 1 (which also appears in the PASS poster on the CD), we provide a fast and simple message: "Think smart and look at the details!" During appropriate times during the day, remind students to closely attend to information being discussed. We need to teach children to approach *all* their work with an understanding of how well they are focused on the details and resisting distractions in their environment. Throughout the day, the teacher should

1. Teach children to be aware of their level of attention and resistance to distraction.
2. Encourage children by asking: "Are you able to focus?" or "Are you getting distracted?"
3. Remind the students that Attention is necessary for reading, writing, and arithmetic, as well as in sports, playing a musical instrument, driving a car, and so forth.
4. Teach children that they may have to modify their environment so that they can attend better.
5. Remind students that learning requires attention to detail and resisting distractions.

LEAR

Focus: Am I paying attention?

Think smart and
look at the details!



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Frankie

Help
Frankie
better
manage his
attention
problem

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Overcoming Problems with Inattention

Attention is the process a person uses to focus thinking on a particular stimulus while ignoring others. Throughout a school day, a student must pay attention to the teacher, the instructions being given, what must be done, and what specific materials are needed, while ignoring other students talking, students playing outside the window, and a cart rolling by in the hall. Attention processes allow a child to selectively focus on things heard or seen and resist being distracted by irrelevant sights and sounds. Focused attention is direct concentration on something, such as a specific math problem. Selective attention involves the resistance to distraction, such as listening to the teacher and not the cart in the hall. Sustained attention is continued focus over time.

Some children have difficulty with focused thinking and resisting distractions. These children fit the description of attention-deficit/hyperactivity disorder (ADHD), predominantly inattentive type (American Psychiatric Association, 2000). Children with the inattentive type of ADHD are different from those with the predominantly hyperactive-impulsive type of ADHD, which is described by Barkley and Murphy (1996) as a delay in the development of inhibition, disturbed self-regulation, and poor organization over time. Children with ADHD, hyperactive-impulsive type cannot control their behavior and have inattention problems that are related to a failure in the process of planning on the Cognitive Assessment System (CAS; Naglieri, 1999).

How to Help a Child Overcome Problems with Inattention

The first step is to help the child understand the nature of his or her Attention problems, including

1. Concepts such as Attention, resistance to distraction, and control of Attention
2. Recognition of how Attention affects daily functioning
3. Recognition that the deficit can be overcome
4. Basic elements of the control program

Second, teachers and parents can help the child improve his or her motivation and persistence:

1. Promote success via small steps.
2. Ensure success at school and at home.
 - Allow for oral responses to tests.
 - Circumvent reading whenever possible.
3. Teach rules for approaching tasks.
 - Help the child to define tasks accurately.
 - Assess the child's knowledge of problems.
 - Encourage the child to consider all possible solutions.
 - Teach the child to use a correct test strategy (Pressley & Woloshyn, 1995).

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Frankie - Intervention

- Level I: Help child understand the deficit
 - Attention, resistance to distraction,
 - Recognition of how the deficit affects daily functioning
- Level II: Improve Motivation & Persistence
 - Promote success via small steps
 - Ensure success at school and at home
 - Allow for oral responses to tests to circumvent reading when possible

Frankie - Intervention

- Teach rules for approaching tasks
 - Define tasks accurately
 - Assess child's knowledge of the problem
 - Consider ALL possible solutions
 - Evaluate value of all possible solutions
 - Checking work carefully is required
 - Correct your own test strategy (see Pressley & Woloshyn, 1995, p. 140).

Frankie - Intervention

- Discourage passivity / encourage independence
 - Teacher should only provide as much assistance as is needed
 - Discourage exclusive use of teacher's solutions
 - Child needs to correct own work
 - Child needs to learn to be self-reliant (Scheid, 1993).

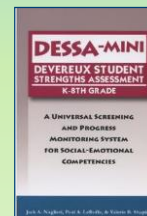
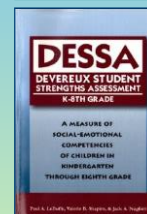
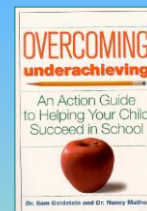
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Frankie – Intervention Social-Emotional

- Improve resilience and self-esteem – see Goldstein & Mather's book for suggestions
- Measure social-emotional competence in all students especially those who are experiencing learning problems
 - 72-item *DESSA* to find specific areas of need
 - Universal screening with 8-item *DESSA-mini*

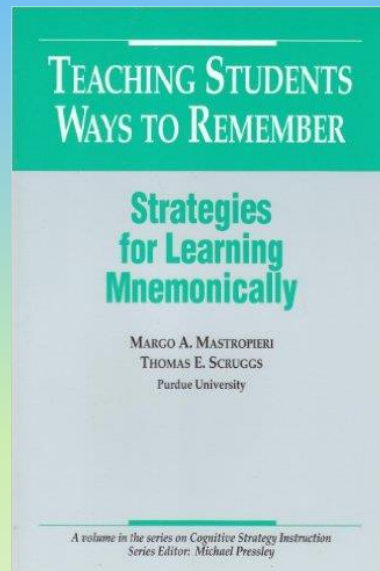


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Mastropieri & Scruggs (1991)

- Mnemonics are strategies:
 - for learning
 - for improving memory
- Topics include:
 - vocabulary, science, reading, spelling, math



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Frankie

- **Spelling**
 - Strategies for Spelling (pp.102–103)
 - Segmenting Words for Reading/Decoding and Spelling (p. 89)
- These are designed to help him perform better when tasks require a lot of Successive processing.

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Frankie - Use Planning Strength

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Strategies for Spelling

Spelling is an activity that requires the recall of specific letters in order and combining sounds with letter groups so that words can be recognized. Good spellers are skilled at memorizing how to correctly spell words even when the words are difficult or unpredictable. Often, spelling lists are given and students write the words over and over or rewrite them alphabetically. In order to make spelling easier for these students, give them a plan or strategy that includes various rules for spelling. A child who knows or has access to various spelling rules is likely to be able to spell many words correctly, rather than just the few that have been memorized. This intervention is intended to help students use certain rules or plans to spell words, particularly ones that are commonly misspelled or are spelled in a way other than how they sound.

When a child uses a rule or plan to spell, the answer is obtained by thinking (using the plan or rule), rather than just relying on remembering the string of letters. For example, a student may want to spell *science* but may not be sure of the order of the letters. If the child is taught the rule "i before e except after c," then he or she is more likely to spell the word correctly. This strategy changes the task from one that demands Successive processing to one that involves Planning.

How to Teach Strategies for Spelling

Following are a number of rules and strategies for spelling words. This list is not intended to be exhaustive, but it includes many of the major rules used for spelling. These rules may be varied, and the more memorable they are for the student, the more likely they are to be used (see the Mnemonics for Spelling handout [p. 101] for additional interventions). Students also need to understand that these are rules of thumb, and in some cases the rules do not work for every word.

- Write *i* before *e* except after *c* (e.g., *receive*, *perceive*, *field*, *believe*, *niece*, *siege*).
- The letter *q* is always written with *u* and sounds like "kw."
- The vowel *y*, not *i*, is used at the end of English words (e.g., *my*).
- The majority of nouns in English form their plural by simply adding a final *-s*.
- Nouns that end with *-s*, *-z*, *-x*, *-sh*, *-ch*, and *-o* form their plural by adding *-es* (e.g., *glasses*, *buzzes*, *boxes*, *bushes*, *switches*, *potatoes*, *heroes*). Some exceptions include *studios*, *pianos*, *kangaroos*, and *zoos*.
- To form plurals for nouns that end in a consonant and *-y*, change *-y* to *-i* and add *-es* (e.g., *babies*, *spies*, *puppies*).
- To form plurals for nouns that end in *-f* or *-fe*, change the *-f* to *-v* and add *-es* (e.g.,

Strategies for Spelling (continued)

- When a two-syllable word ends with a *v* final syllable, double the final consonant *v* (admitting).
- Words with a silent final *e* are written with a vowel (e.g., *having*, *writing*, *biking*).
- After a single vowel at the end of a one-syllable word, double the final consonant (e.g., *full*, *puff*, *pass*).
- The letter *s* never follows the letter *x* (e.g., *axis*).
- All *i* is written with one *l* when added to another syllable (e.g., *litter*).
- When added to another syllable, *ill* and *il* are written with one *l* (e.g., *illness*, *illegible*).
- The letter *z*, never *s*, is used for the "z" sound (e.g., *zipper*).
- Words beginning with a vowel and ending in *-ed* or when a *y* is added (e.g., *desire*, *desired*). There are some exceptions to this general rule (e.g., *desire*, *desired*).
- Only one word ends in *-sede*: *suspense*. Proceed, succeed. All other words ending in *-sede*, precede, recede.

Some Other Strategies

- Take the word apart. Break down words into their component parts. Why is it spelled that way? A prefix is a letter or group of letters that comes before the root word. A suffix is a letter or group of letters that comes after the root word. When a word has a prefix, imagine that there is a hyphen between the prefix and the root word. When a word has a suffix, you can often use a strategy similar to the one for the prefix. When a word has a suffix, then double the letter before the suffix (e.g., *actual-ly*, *soil-less*).
- Identify suffixes. When a word has a suffix, you can often use a strategy similar to the one for the prefix. When a word has a suffix, then double the letter before the suffix (e.g., *actual-ly*, *soil-less*).

Who Should Learn Strategies for Spelling?

Frankie - Use Planning Strength

➤ This strategy helps him organize the sequence of sounds and letters thereby focus is achieved

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Segmenting Words for Reading/Decoding and Spelling

Decoding a written word requires the person to make sense out of printed letters and words and to translate letter sequences into sounds. This demands understanding the sounds that letters represent and how letters work together to make sounds. Sometimes words can be segmented into parts for easier and faster reading. The word *into* is a good example because it contains two words that a child may already know: *in* and *to*. Segmenting words can be a helpful strategy for reading as well as spelling.

How to Teach Segmenting Words

Segmenting words is an effective strategy to help students read and spell. By dividing the words into groups, students also learn about how words are constructed and how the parts are related to one another. Students should be taught that words can be broken down into segments or chunks. The teacher should present the following methods in a direct and explicit manner:

- Take the word apart. Break down the word into its component parts or syllables. For example, look at the word *reshaped*. It includes the main word *shape* with the prefix *re-* and the ending *-d*. Knowing that the main word *shape* has *re* and *d* added makes it easier to recognize than to try and sound out *r-e-s-h-a-p-e-d*.
- Identify prefixes. A prefix is a letter or group of letters at the beginning of a word. When a word has a prefix, imagine that there is a hyphen between the word and the prefix, and you can usually see the main word. For example, *misstep* includes the prefix *mis-* and the word *step* that are simply put together.
- Identify suffixes. Similarly, when a word has a suffix (i.e., a letter or group of letters at the end), you can often use a strategy similar to the prefix strategy. Just imagine a hyphen between the word and the suffix (e.g., *heart-less*).

Who Should Learn This Technique?

Is Frankie a Typical ADHD Child?

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ADHD

Hyperactive-Impulsive Type

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Case of Christopher - Is He ADHD?

- Problems
 - behavior problems
 - impulsive & disorganized
 - forgets assignments
 - can't stay on task
 - poor grades
- Clinical Observations
 - anxious about testing
 - used simple strategies
 - did sloppy work
- control problems (threw pencil when frustrated)
- impulsive choices made
- RESULTS
- CBCL Externalizing = 68
 - failure in control, impulsivity problems, arguing, attention-getting behaviors.

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Case of Christopher (continued)

➤ WISC-III (FS = 106)

VC = 114 PO = 102

FD = 96 PS = 94

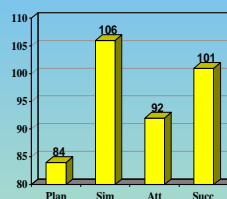
➤ WJ-Achievement

▪ Broad Reading = 106

- Comprehension = 117
- Word Attack = 108
- Dictation = 82

▪ Broad Math = 100

- Applied Problems = 93
- Calculation = 86



-11.8(W) 10.3(S) -3.8 5.3
Child's mean = 95.8

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Intervention Protocol

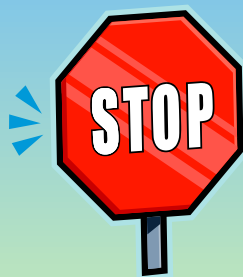
- Help child understand their PASS strengths and areas of challenges (**Intentional & Transparent**)
- Encourage Motivation & Persistence (**Mindsets**)
- Teach/Stress strategies for approaching tasks (**Skill Sets**)
 - Student generated
 - Model and Scaffold as needed
- Encourage independence and self efficacy (**Metacognition/Self Assessment**)

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Think and Talk



&



What would you recommend as possible interventions for Christopher's planning challenge?

NOTE: STOP AND TALK is important because the brain retains 50% through talk.

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Intervention Protocol

- Help child understand their PASS strengths and areas of challenges (**Intentional & Transparent**)
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Helping Children Learn

- Planning Facilitation
- Plans for Basic Math Facts
- Touch Math for Calculation
- Seven Step Strategy for Math Word Problems
- Chunking Strategy for Multiplication
- Other ideas?

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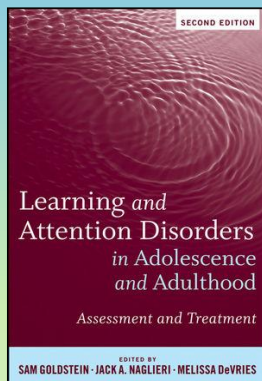
IQ vs PASS

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ADHD Profiles by Ability Test



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CHAPTER

6

Assessment of Cognitive and Neuropsychological Processes

JACK A. NAGLIERI
SAM GOLDSTEIN

INTRODUCTION

Assessment of intelligence plays an important role in the process of determining if an adolescent or adult has a disability. For those suspected of having a Specific Learning Disability (SLD), the intelligence test provides an important reference point to compare to levels of achievement. For those who may have Attention-Deficit/Hyperactivity Disorder (ADHD), the measure of intelligence is used to rule out other disabilities that may better explain the person's behavior. Intelligence tests have and will continue to provide a critical component of any comprehensive assessment needed to determine the presence of disabilities, such as SLD and ADHD. Their importance, however, demands a thorough understanding of the strengths and limitations of these tests of ability, an appreciation of the research on their effectiveness, and an examination of modern views of assessing intelligence. The goal of this chapter is to address these issues.

This chapter reexamines intelligence as measured by traditional IQ tests with special attention to the utility such tests have for diagnosis. In order to achieve this goal, the chapter includes a brief overview of the history and definitions of intelligence and examines examples of measures of intelligence more closely. Emphasis will be placed on the importance of understanding how intelligence is conceptualized and measured by different tests and the implications this has for assessment. The chapter also provides a conceptual model of assessment of basic psychological processes and how that information can aid in the diagnostic process and treatment of adolescents and adults.

Naglieri & Goldstein (2011)

GROUP PROFILES BY ABILITY TEST

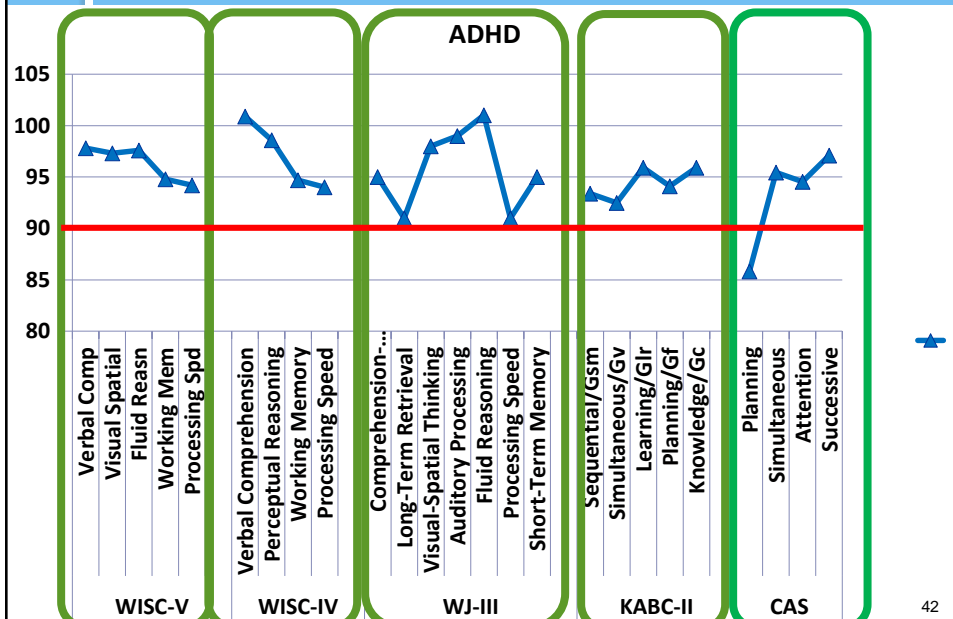
Because ability tests play such an important role in the diagnostic process, it is crucial to understand the sensitivity each test may have to any unique characteristics of those with an SLD or attention deficit. Clinicians need to know if an adolescent or adult has a specific deficit in ability that is related to a specific academic learning problem. There has been considerable research on, for example, Wechsler subtest profile analysis, and most researchers conclude that no profile has diagnostic utility for individuals with SLD or ADHD (Kavale & Forness, 1995). The failure of subtest profiles has led some to argue (e.g., Naglieri, 1999) that scale, rather than subtest, variability should

1. We need to know if intelligence tests yield distinctive profiles

2. Subtest profile analysis is UNSUPPORTED so use scale profiles instead

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Profiles for students with ADHD



Canivez & Gaboury (2010)

- “the present study demonstrated the potential of the CAS to correctly identify students who demonstrated behaviors consistent with ADHD diagnosis.”
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Cognitive Assessment System Construct and Diagnostic Utility in Assessing ADHD

Gary L. Canivez
Eastern Illinois University

Allison R. Gaboury
Puyallup School District, Puyallup, WA

Paper presented at the 2010 Annual Convention of the
American Psychological Association, San Diego, CA

Correspondence concerning this paper should be addressed to Gary L. Canivez, Ph.D., Department of Psychology, Eastern Illinois University, 600 Lincoln Avenue, Charleston, IL 61920-3099. Dr. Canivez can also be contacted via E-mail at glcanivez@eiu.edu or the World Wide Web at <<http://www.uia.edu/~glcanivez>>. This *handout* is based on a manuscript presently submitted for publication so please do not reference without permission.

The Das-Naglieri Cognitive Assessment System (CAS; Naglieri & Das, 1997) is a test of cognitive abilities or intelligence based on the Planning, Attention, Simultaneous, and Successive Theory (PASS; Das, Naglieri, & Kirby, 1994). Studies of CAS performance by children with attention deficit hyperactivity disorder (ADHD) typically show lowest performance on Planning, deficits in Attention, but normal Simultaneous and Successive processing (Crowdell, 2002; Naglieri & Das, 1997; Naglieri, Goldstein, Jensen, & Schwabach, 2003; Naglieri, Salter, & Edwards, 2004; Paulino, 1999; Penninger, 2002; Van Luit, Kruenberg, & Naglieri, 2005). Such distinct group difference studies are important for validity and are necessary but not sufficient for establishing diagnostic utility of a test. The present study examined both distinct group differences and diagnostic utility of the CAS related to ADHD and found support for both.

The Das-Naglieri Cognitive Assessment System (CAS; Naglieri & Das, 1997) is a test of cognitive abilities or intelligence based on the Planning, Attention, Simultaneous, and Successive Theory (PASS; Das, Naglieri, & Kirby, 1994) which itself is based on Luria's Functional System of neuropsychology (Luria, 1966; Luria, 1973). PASS theory (Das, Naglieri, & Kirby, 1994; Naglieri & Das, 1997) proposes that children with attention deficit hyperactivity disorder (ADHD) would, as Barkley (2003, 2006) suggests, be more impulsive (and less reflective) in their cognitive processing, which in turn would impact planning processing. Attentional difficulties would affect attention processing. Studies of CAS performance of children with ADHD typically show lowest performance on Planning with deficits in Attention but normal Simultaneous and Successive processing (Crowdell, 2002; Naglieri & Das, 1997; Naglieri, Goldstein, Jensen, & Schwabach, 2003; Naglieri, Salter, & Edwards, 2004; Paulino, 1999; Penninger, 2002; Van Luit, Kruenberg, & Naglieri, 2005). While these group difference studies provide support for the construct validity of the CAS via distinct group differences, such support is inadequate for determining the utility of the CAS in individual diagnostic decision-making (McMillen, Stewart, & Williams, 2005). Distinct

Specificity = .85, Negative Predictive Power = .98). While a number of CAS studies regarding students with ADHD have examined distinct group differences and found support (Crowdell, 2002; Naglieri & Das, 1997; Naglieri, Goldstein, Jensen, & Schwabach, 2003; Naglieri, Salter, & Edwards, 2004; Paulino, 1999; Penninger, 2002; Van Luit, Kruenberg, & Naglieri, 2005), to date no studies have been conducted on the diagnostic utility of the CAS in correctly identifying individual children with ADHD from those without ADHD or from those with other disruptive behavior disorders. The present study examined the construct validity of the CAS by examining distinct group differences and the diagnostic utility of CAS in correctly differentiating individuals with ADHD symptoms from those within a normal control group.

Method

Participants

Informed parental consent was obtained for a final sample of 40 students from elementary schools in suburban Pierce County, Washington, ranging from kindergarten to second grade. Groups consisted of children meeting diagnostic criteria for ADHD ($n = 20$) and a group of children who were randomly selected and matched (to the extent possible) on key

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LET'S TAKE A BRAIN BREAK or Syn-Nap



The brain needs time to
process!

- **Stretch**
- **Cross Laterals**
- **Walk and Talk**
- **Energizers**
- **Relaxers**



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Quote Here

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ADD Score Rating Scale slides

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Let's Take a TEST !

- First a word repetition test
- I will say some words and you need to write them in order -- AFTER I finish the saying the words.
- Next, I'll show you numbers, then take them away, and you need to write them in order

CAS2



5 3 7

Item 12

CAS2

4 3 8 6 1

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CAS2

5 1 4 9 2 8 3

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Insights...

- Even though tasks were different in content and modality, they required the same kind of thinking



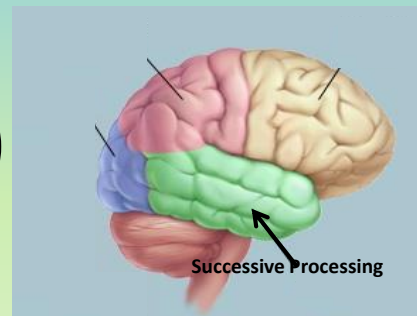
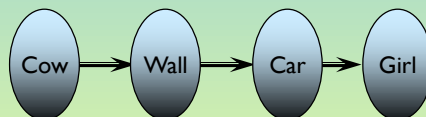
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PASS: Successive

- **Successive** processing is used whenever we do something in a specific serial order
 - Anything we comprehend, speak, or do in a sequence requires successive processing



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PASS Theory: Successive

- **Successive** processing is used when information is in a specific serial order
- Decoding words
 - Letter-sound correspondence
 - Phonological tasks
 - Understanding the syntax of sentences
 - Comprehension of written instructions
 - Sequence of words, sentences, paragraphs
 - Remembering the sequence of events in a story that was read

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CAS2: Rating Scale Successive

Directions for Items 31–40. These questions ask how well the child or adolescent remembers things in order. The questions ask about working with numbers, words, or ideas in a series. The questions also ask about doing things in a certain order. Please rate how well the child or adolescent works with things in a specific order.

During the past month, how often did the child or adolescent ...

	Never	Rarely	Sometimes	Frequently	Always
31. recall a phone number after hearing it?	0	1	2	3	4
32. remember a list of words?	0	1	2	3	4
33. sound out hard words?	0	1	2	3	4
34. correctly repeat long, new words?	0	1	2	3	4
35. remember how to spell long words after seeing them once?	0	1	2	3	4
36. imitate a long sequence of sounds?	0	1	2	3	4
37. recall a summary of ideas word for word?	0	1	2	3	4
38. repeat long words easily?	0	1	2	3	4
39. repeat sentences easily, even if unsure of their meaning?	0	1	2	3	4
40. follow three to four directions given in order?	0	1	2	3	4

____ + ____ + ____ + ____ + ____ =
 Successive Raw Score

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Successive: Word Series

- The child repeats a series of words in the same order the examiner says them

1. Wall-Car
2. Shoe-Key...
10. Cow-Wall-Car-Girl
11. Dog-Car-Girl-Shoe-Key...
27. Cow-Dog-Shoe-Wall-Man-Car- Girl-Key-Book

Successive and Syntax

➤ Sentence Repetition

- Child repeats sentences exactly as stated by the examiner such as:
- ***The red greened the blue with a yellow.***

➤ Sentence Questions

- Child answers a question about a statement made by the examiner such as the following:
- ***The red greened the blue with a yellow. Who got greened?***

Phonemic Awareness = Successive

"Now I am going to say parts of words. I want you to put the parts together to make a whole word."

Blending: Advantage

Item	Correct response	# of syllables	Score
ad : van : tage	advantage	3	0 1

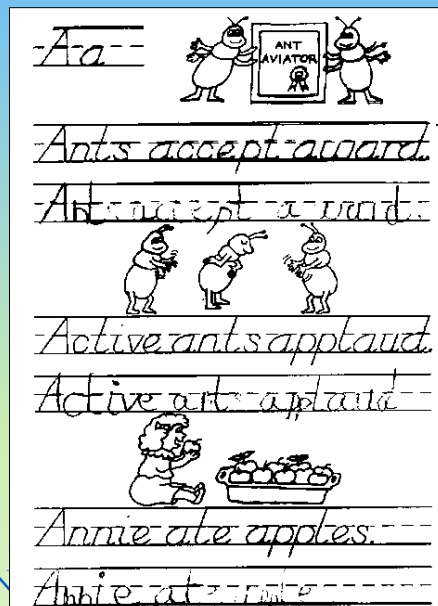
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Successive Reading Practices

The sequence of the sounds is emphasized in this work sheet



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Successive Processing & Reading Decoding

➤ The ability to sequence and sequence multiple sounds together to identify a word in print is critical for reading decoding



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Positioning Sounds: Successive

I'm going to say a word. I want you to tell me which sounds are missing in the word."

Pre-K to 1st: doll



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Speech and Successive processing (Samantha at age 3 ½ yrs)



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Learning Math Facts

$$8 + 9 = 17$$

$$8 + 9 = 17$$

* +

$$8 + 9 = 17$$



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Building the Big Picture

Big Idea :PASS

Subheadings:

Planning

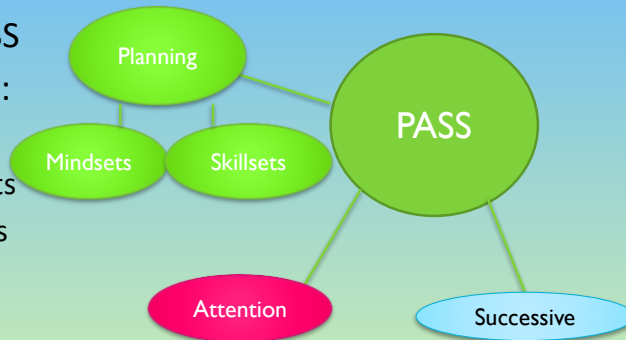
Mindsets

Skill Sets

Attention

Successive

Simultaneous



You will be capturing the big idea of each key part of PASS on your organizer after we teach each section.

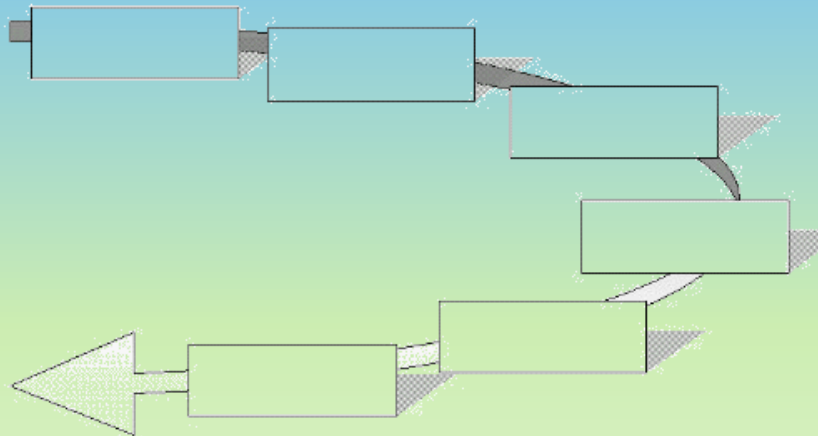
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Sequencing Activities

Sequential



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Sit up

Lean forward

Activate your thinking

Name key information

Track the talker



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Sit

Lean

Activate

Name

Track



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S L A N T



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Talk About It!

- What did you hear me say and see me do as I taught this strategy to you?
- Why do you think I did these things?
- Share.



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Math Sequencing

- Encouraging students to write out the steps for solving problems. (For example: Steps for solving addition and subtraction problems that include regrouping)
- Use a simple sheet of paper folded into four squares. Ask students to write the steps in order in the squares.

Sequencing Games



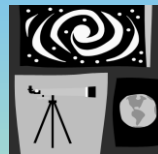
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Adding Fractions Mnemonic

Your Assignment:



1. You have been assigned to groups today based on your Multiple Intelligence strengths.
2. With your group, create a memory trick using your MI strength that would assist someone in remembering the steps of adding fractions.
3. Share your creation with the rest of the class.

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1. *Trick 1: Number 1 variations*

2. *Trick 2: Staircase pattern*

3. $\frac{1}{1} = \frac{1}{1}$

4. $N + N$

5. *Trick 5: Long number sequence*

Steps for Adding Fractions
9th Grade

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Seven Easy Sequencing Tricks for Numbers

- Create associations.
- Break long numbers into smaller parts (3 is good)
- Look for patterns.
- Learn actively.
- Repeat it
- Visualize the shape the numbers make on a keypad.
- Convert numbers to words or images

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Study Tips For Learning Spelling Words

- **Drastically mispronounce the word to help recall the spelling.** For example, say /par-lee-uh-ment/ for *parliament* or /ton-goo/ for *tongue*. (Of course, if a child has trouble pronouncing the word in the first place, having them intentionally mispronounce it might be counterproductive!)
- **For words with a silent letter, pronounce the silent letter to help remember it's there.** For example, *walk* becomes /wallk/ and *sign* becomes /sigg-en/.
- Using a white board, print the word, but **use a different color for the vowels** so they stand out clearly

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- **Take note of the vowels in the word.** Is there anything that stands out, such as there being all *e*'s and no *a*'s (such as in *cemetery*), or the vowels appear only in singles or pairs, or the vowels appear in alphabetical order, or every other letter is a vowel, etc.).
- **Take note of any prefixes or suffixes.** Separate those affixes from the main word when thinking about the spelling.
- **Write out the word in full, then circle any smaller, recognizable words you see in it.** For example, *threadbare* can be thought of as *th* • *read* • *bare* and *believe* can be thought of as *be* • *lie* • *ve*. (Of course, you can then go on to say, "Don't *believe* a *lie*," to help you remember that there's a *lie* in *believe*.)

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- If there are no recognizable words (i.e. real words) in the larger words, then simply **break the word up into chunks (or syllables if desired) that are easier to remember**. Once the word is broken up, again it might be helpful to mispronounce the word by emphasizing the sound of those individual chunks.
- For some words, such as *license*, which has two /s/ sounds, **take note of the order of the letters that say /s/**. For example, in the word *license*, *c* comes before *s*, just as it does in the alphabet.
- 9. **Circle any double letters, and, of course, take note of them**. Again, mispronounce (overpronounce) the doubled letter to help remember it. For example, say hop • ping (and maybe even picture a bunny named "Ping" hopping!

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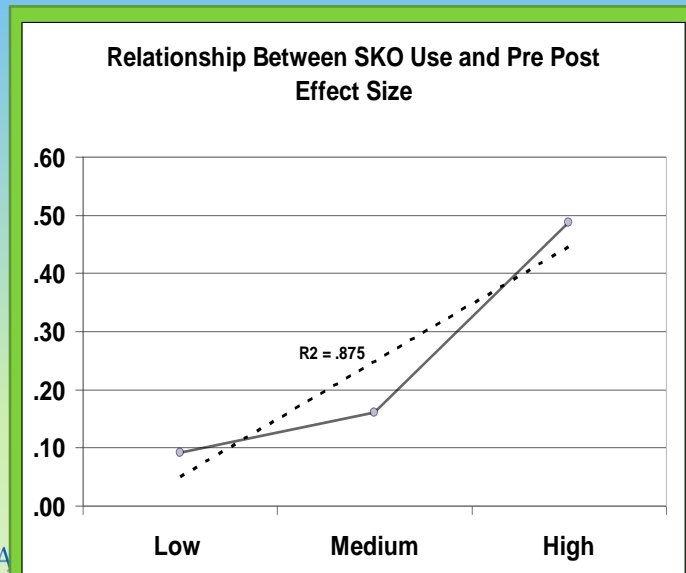
Emphasis on Sequencing **ADD** **VIDEO**



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SKO Research Study #2



LEA

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Using Digital Storytelling in the Classroom

- Load pictures from a story out of order, and then save the file as a project.
- Have students rearrange the pictures to assess them for their understanding of sequencing.

Storybird Collaborative storytelling

VERSION 0.4

Create | Read | Tour

Sign in | Sign up | Help

Search

Storybirds are short, art-inspired stories you make to share, read, and print.

Read them like books, play them like games, and send them like greeting cards. They're curiously fun.

[Start a Storybird Now](#) or [take the tour](#)

Storybirds, the perfect Valentine.

Mapping Into Writing

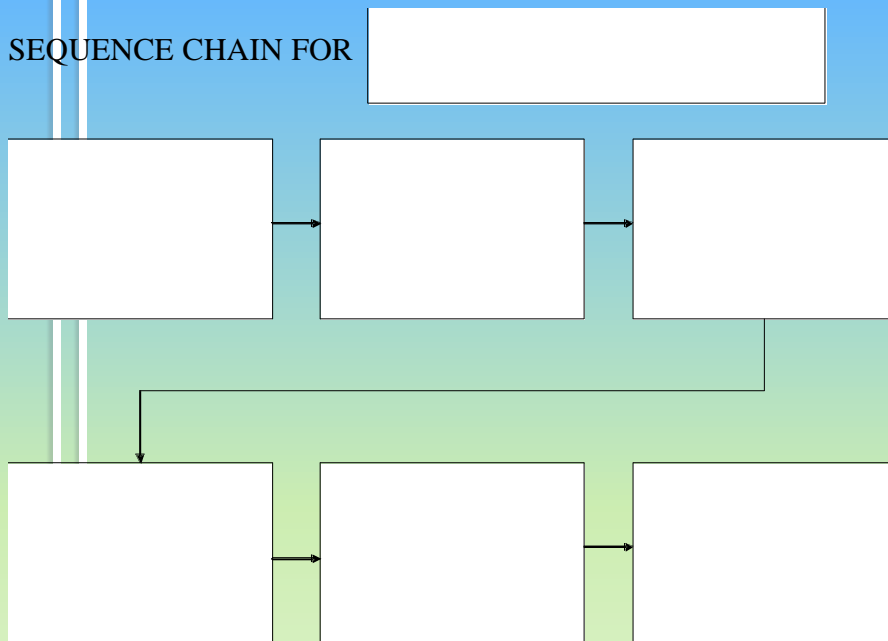
- If we want students to write effective non-fiction, we need to model and scaffold how to do the type of writing we require of them.
- Mapping for writing gives students a framework for organizing their thoughts.

Pg. 33

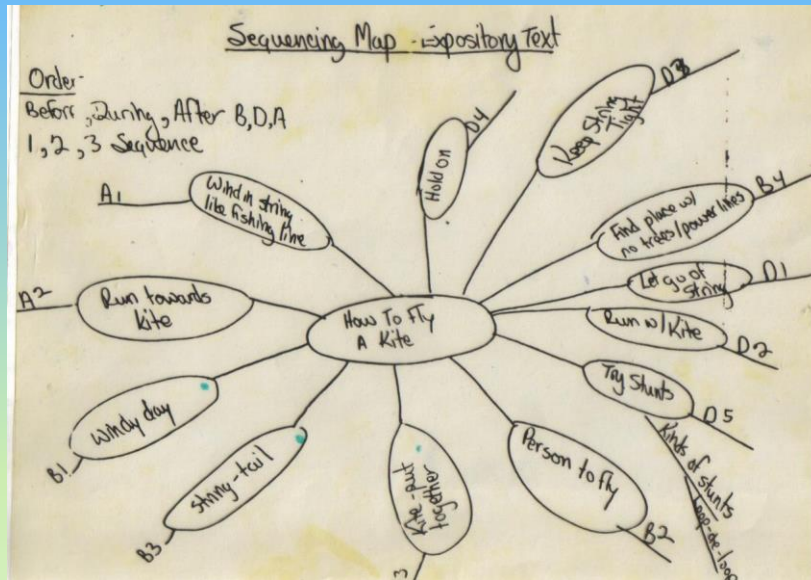
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SEQUENCE CHAIN FOR

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Read this and find out how to do just that. It's easy, fun and you can learn fast.

The first thing you need to do is buy a kite. Make sure it has all the parts, especially string and a roller. Once you get the kite home you need to build it and then tie the string to the bottom of it. Wait for a windy, clear day, then call a friend to come and help. Next you go outside and find a big area with no power lines or trees. Then have your friend hold onto the kite as you hold onto the string. Next you start running until you feel the kite catch the wind. When it catches the wind you tell your friend to let go. Finally, you are flying the kite. Now you can do tricks like...

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How to Make Mashed Potatoes By Chase

Eating mushy mashed Potatoes is my favorite thing to do. The best thing is that they are easy to make.

First you get out the potatoes. Then you peel the skin off the potatoes and put them in a pan with water. After you are done boiling the potatoes, then drain the potatoes and put them back in the pan. Now put butter and milk on them. Then you mash the potatoes. When you are done, you serve the potatoes. Then you eat them.

So go home and make your self some mashed potatoes. Follow the instructions I told you and they'll turn out just fine.



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PASS Theory: Successive

Examples of classroom problems related to Successive Processing

- Trouble blending sounds to make words
- Difficulty remembering numbers in order
- Reading decoding problems
- Difficulty remembering math facts when they are taught using rote learning ($4 + 5 = 9$).

Naglieri, J. and Pickering, E., *Helping Children Learn*, 2003



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Jacob 6th grade

Presenting Concerns: Reading, Math Word Problems, Anxiety

WISCV	COMPOSITE SCORE	RANGE	PERCENTILE RANK
Verbal Comprehension	89	Below Average	23%
Visual Spatial	84	Below Average	14%
Fluid Reasoning	82	Below Average	12%
Working Memory	72	Very Low	3%
Processing Speed	76	Very Low	6%
FULL SCALE SCORE	81	Below Average	10%
WIAT III Reading	87	Below Average	19%
WIAT III Math	90	Average	25%
WIAT III Writing	94	Average	34%

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Jacob 6th grade

CAS-2	COMPOSITE SCORE	RANGE	PERCENTILE RANK
Planning: the ability to apply a strategy, and self-monitor and self-correct performance while working toward a solution.	92	Average	30%
Attention: the ability to selectively focus on a stimulus while inhibiting responses from competing stimuli.	98	Average	45%
Simultaneous Processing- is the ability to reason and problem solve by integrating separate elements into a conceptual whole, and often requires strong visual-spatial problem solving skills.	90	Average	25%
Successive Processing- is the ability to put information into a serial order or particular sequence.	72	Very Low	3%
CAS-2 COMPOSITE SCORE	86	Below Average	18%

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Jacob 6th grade

FAR index	Standard score (95% CI)	Percentile	Qualitative descriptor
Phonological Index	75	5%	Moderately Below Average
Fluency Index	92	30%	Average
Mixed Index	81	10%	Below Average
Comprehension Index	97	42%	Average
FAR Total Index	84	14%	Below Average

KEY INTERPRETATION	Score	Percentile	Descriptor
Nonsense Word Decoding – requires the student to decode a series of nonsense words presented in order of increasing difficulty .	71	3%	Moderately Below Average
Irregular Word Reading Fluency – the student reads a list of phonologically irregular words arranged in order of increasing difficulty in 60 seconds.	95	37%	Average

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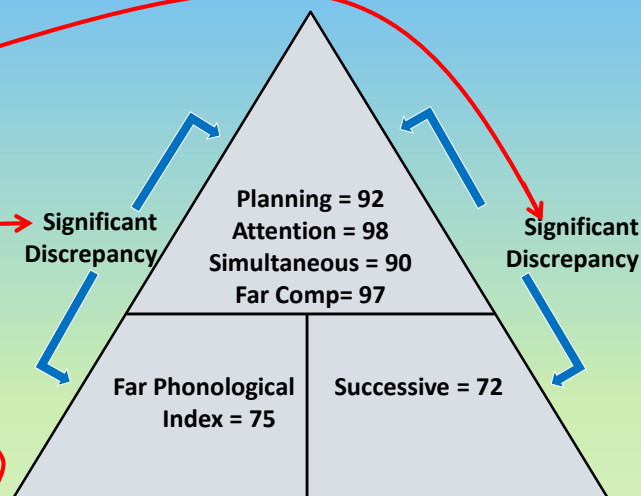
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Discrepancy Consistency for Jacob

Poor Successive + Poor Phonological = SLD in Reading Decoding

- Discrepancy between high and low processing scores
- Discrepancy between high processing and low achievement
- Consistency between low processing and low achievement



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Consistency

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Successive Processing Interventions

- Alphabetic Phonics (Orton-Gillingham)
- Recipe for Reading
- SRA Corrective Reading
- Earobics II
- SIPPS
- Lindamood Seeing Stars Program
- LEXIA
- Horizons
- Read Well
- DISTAR (*Reading Mastery*)
- Fast Forward II(Tallal)
- Earobics I
- Phono-Graphix
- Saxon Phonics Program
- Success for All
- Ladders to Literacy
- Foundations
- Road to the Code
- Scott Foresman Early Intervention Reading

Now an intervention example

The Case of Larry – Age 8 Years 8 months

Linda M. Einhorn-Marcoux, M.A.,
Examiner & Intervention Instructor

Naglieri, J. A. (in press). Best Practices in Linking Cognitive Assessment of Students with Learning Disabilities to Interventions in A. Thomas and J. Grimes (Eds.) *Best Practices in School Psychology* (Fifth Edition). Bethesda: NASP.

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Case of Larry

- Larry is a third grader who was evaluated because of parental concern about his chronic problems with spelling and written language
- Larry likes to read but he has spelling problems
- Larry frequently confused the letters b and d and often writes his numbers backwards and reads words backwards (mop as pom)
- Larry says certain words within his sentences out of order

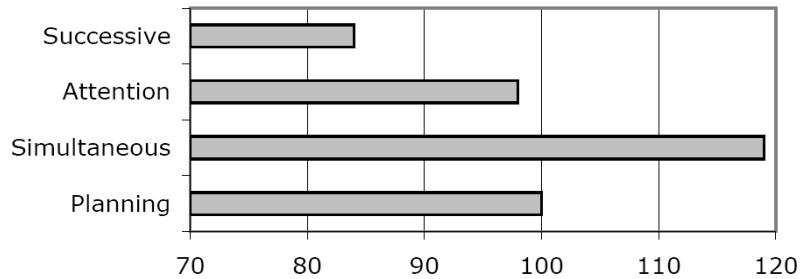
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Larry's PASS scores

	Standard Score	Difference from Mean	
Planning	100	-0.25	-
Simultaneous	119	18.75	Strength
Attention	98	-2.25	-
Successive	84	-16.25	Weakness
Mean	100.25		



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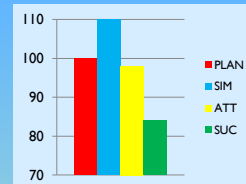
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Larry

► Low achievement test scores

- Letter Word Recognition 83
- Written Expression 81
- Word Attack 86
- Decoding Fluency 81



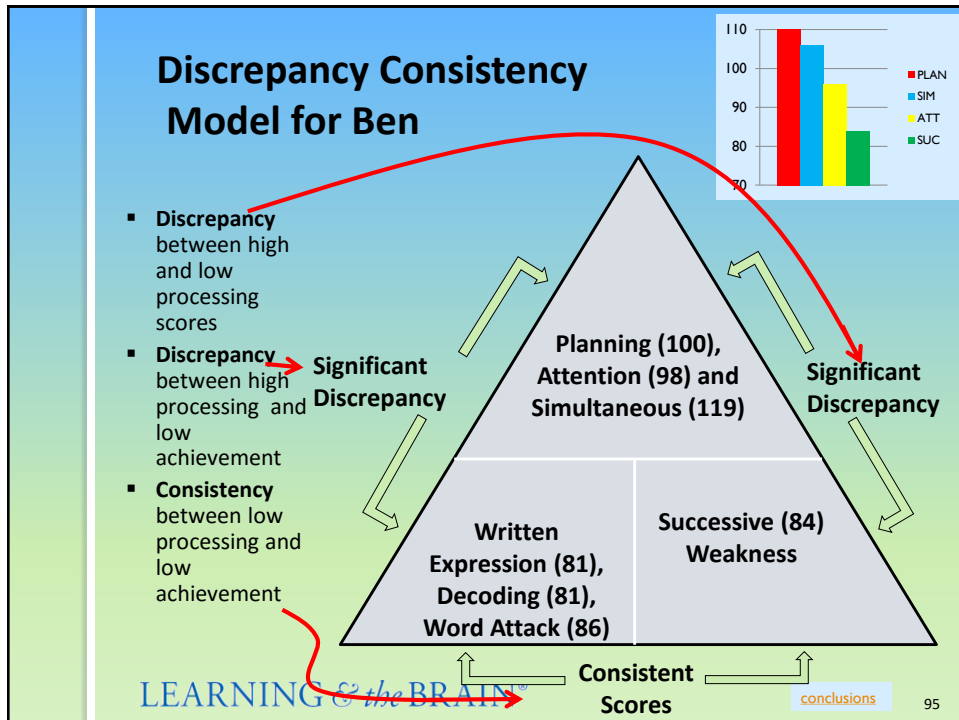
► Meets the definition of SLD

- "... a disorder in 1 or more of the basic psychological processes involved in understanding or in 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."

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Case of Larry

➤ Teach him to recognize sequences

How to Teach Successive Processing Ability

The first step in teaching children about their own abilities is to explain what Successive processing ability is. In Figure 1 (which is included in the PASS poster on the CD), we provide a fast and

**Think smart
and follow the
sequence!**

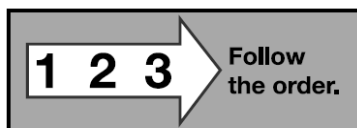


Figure 1. A graphic that helps students understand Successive processing.

simple message: "Think smart and follow the sequence!" We should begin by helping children realize that they have many different types of abilities and that Successive processing is one of them. During appropriate times during the day, remind students to closely attend to the sequence of information—when reading, presenting information in written text, examining the sequence of letters when doing spelling, solving math equations, and so forth. We need to teach children to approach *all* of their work with an understanding of how the information is sequenced. Throughout the day, the teacher should do the following:

Case of Larry – Use Simultaneous Strength

Graphic Organizers for Connecting and Remembering Information

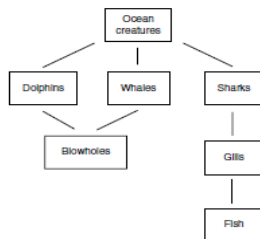


Figure 1. One kind of graphic organizer.

Another type of graphic organizer is a Venn diagram, which uses circles to demonstrate how concepts are related. Figure 2 shows the same information as Figure 1, but in the form of a Venn diagram.

How to Teach Graphic Organizers

Graphic organizers are fairly simple to create. They need not be reserved for factual information. They can be used for activities such as exploring creative concepts, organizing writing, and developing language skills. The following four steps can be used to create a graphic organizer:

1. Select information that you need to present to the child (which may be from a story, a chapter, or any concept).
2. Determine the key components that are necessary for the child to learn.

page 1 of 2

Helping Children Learn: Intervention Handouts for Use in School and at Home, Second Edition, by Jack A. Naglieri & Eric B. Pickering
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Case of Larry

➤ Teach him to use Sequencing strategies

Chunking for Reading/Decoding

Segmenting Words for Reading/Decoding and Spelling

Readi
stand
quenc
more
easily
units

How Decoding a written word requires the person to make sense out of printed letters and words to translate letter sequences into sounds. This demands understanding the sounds that letters represent and how letters work together to make sounds. Sometimes words can be segmented into parts for easier and faster reading. The word *into* is a good example because it contains words that a child may already know: *in* and *to*. Segmenting words can be a helpful strategy for reading as well as spelling.

Pla

Look i
Find th
Sound

How to Teach Segmenting Words

Segmenting words is an effective strategy to help students read and spell. By dividing the word

Segmenting Plan for Spelling

Syllable Addition Combine the first syllable of the first word with the second syllable of the second word to write a Basic or Review Word.

Example: transport + confer = transfer

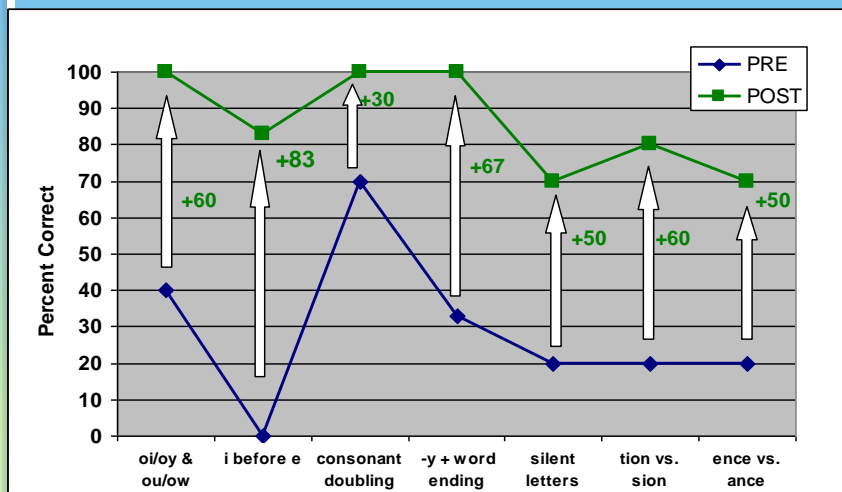
18. adhere + permit
19. inside + constant
20. launder + sundry
21. suppose + apply
22. cuspid + bottom
23. surprise + surgeon
24. effect + comfort
25. journal + chutney
26. whistle + supper
27. bully + mallet
28. empire + deploy
29. campaign + rumpus
30. active + doctor
31. burlap + garden

How Are You Doing?
Write your spelling words in ABC order. Practice any misspelled words with a partner.

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Larry's Pre-Post skills scores

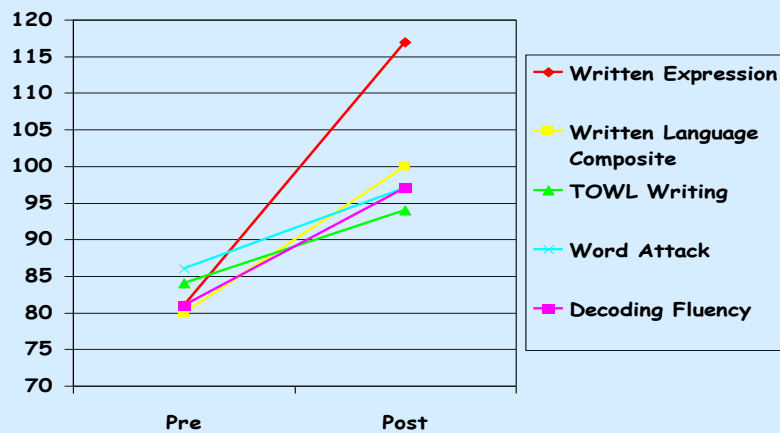


LEARNING & the BRAIN® Jack A. Naglieri, Ph.D.

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Larry's Pre-Post skills scores



Tomorrow

- Successive Processing
- PASS Determination and Planning with your Core Group
- Unpacking the Journey
- Final Projects
- Conclusion!

Feeling Fixed Mindset?

➤ Add video

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● Thank you for sharing and learning with us.



Jack A. Naglieri, Ph.D.
Kathleen Kryza, MA, CIO

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