TKB Before "Class" Starts…

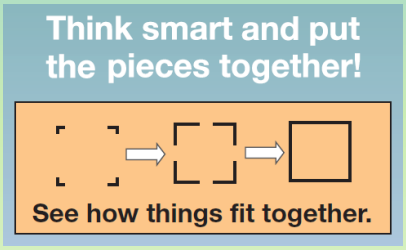
- Make sure your foldables are filled in Day 1-Day 4. Review with your Core Group or Chat Chum.
- Make sure you have the standard scores for your student.
- Do you need anything to be prepped for your Final Project?

Think Smart : Using Mindsets and Metacognition for Student Success –

DAY 5 Simultaneous Processing

Jack A. Naglieri, Ph.D.
Research Professor, University of Virginia & Devereux Center for Resilient Children

Kathleen M. Kryza, MA
International Educational Consultant, Infinite Horizons



Here's Where We're Going…

- Introduction
- Planning
- Mindsets Plus Skill Sets Equals Results
  - Metacognition Wrap Up
  - Mindsets
- Attention & Instruction
- Today's Conclusions

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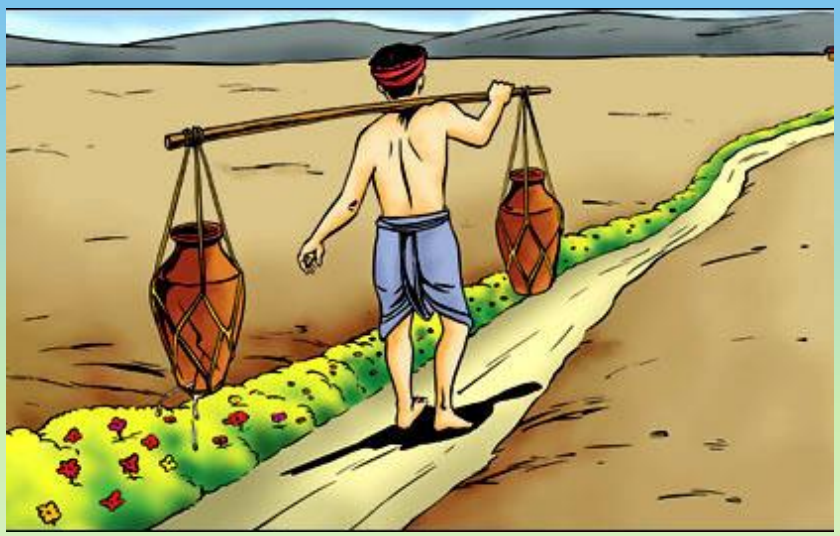
The Cracked Pot…



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Core Groups

What job would you like to do today?

- **C**oach
- **O**rganizer/Time Keeper
- **R**ecorder
- Energizer

Pg. 3

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Mindset Check in…

- How have you changed this week?
  - I have changed…
- What are you taking with you as you leave this adventure?
- I am taking _____ with me.
- What word or phrase summarizes your intention for what you will do with all you've learned?
  - Say your word. (Ex: Be the Change)

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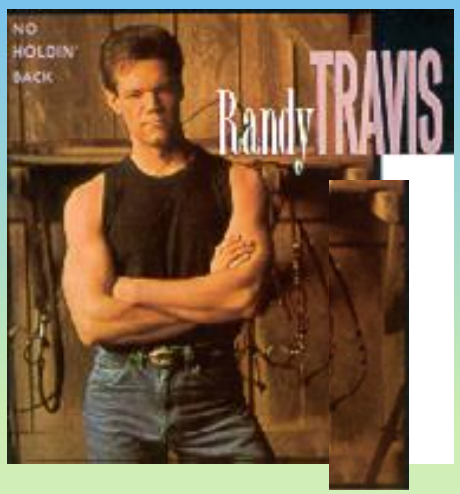
conclusions

6

Simultaneous Verbal Task

- Simultaneous processing using verbal content
- Who is this song about?

My momma's daddy was his oldest son.



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7

Test Youself !

Solve these analogies:

Girl is woman as boy is to _____?

C^7 is to F as E^7 is to _____?

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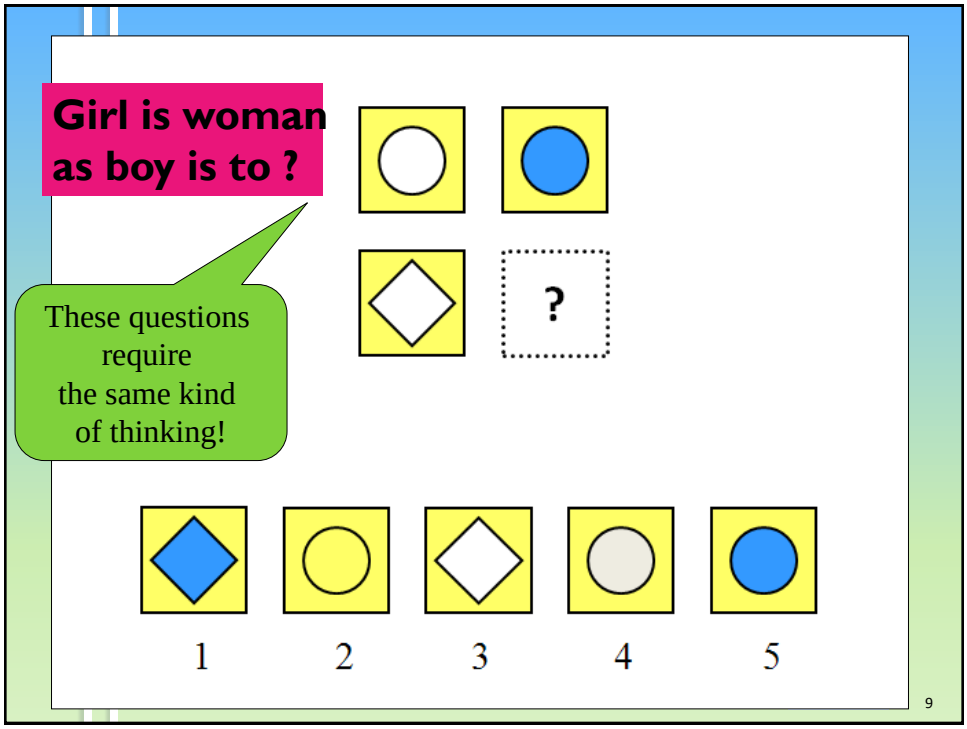
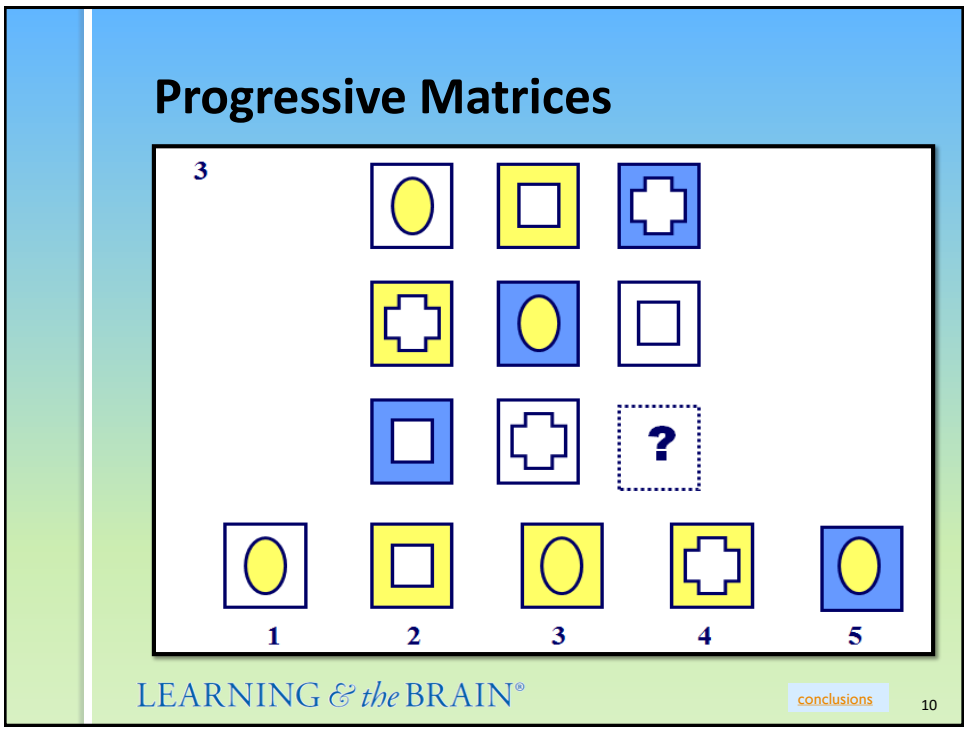

Girl is woman as boy is to ?
These questions require the same kind of thinking!
?
1
2
3
4
5
9


Progressive Matrices
3
?
1
2
3
4
5
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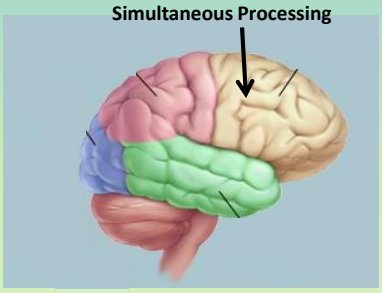
PASS Theory

- **Simultaneous** processing is used to integrate stimuli into groups
  - Stimuli are seen as a whole
  - Each piece must be related to the other
  - Whole language
  - Seeing word as a whole
  - Verbal concepts
  - Geometry, math word problems



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PASS Theory

- **Simultaneous** processing is what Gestalt psychology was based on
- Seeing the whole

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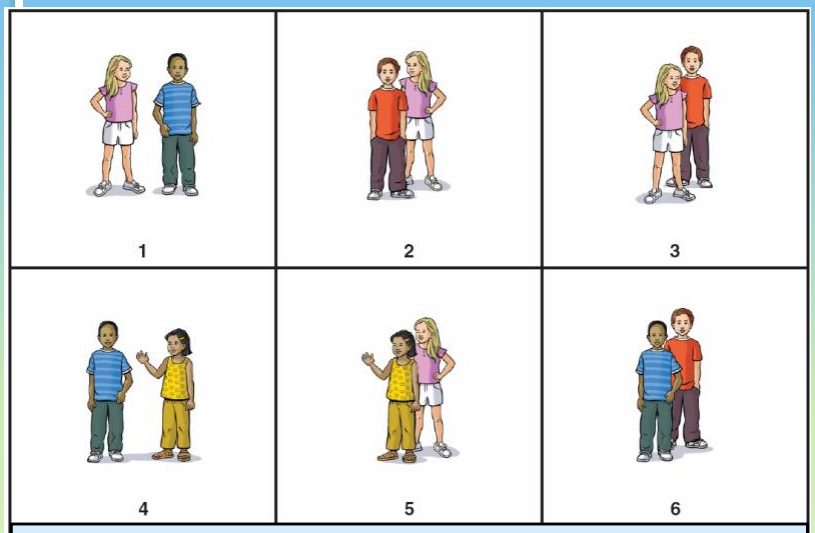
CAS2 Verbal-Spatial Relations



Which picture shows a boy behind a girl?

CAS2: Rating Scale Simultaneous

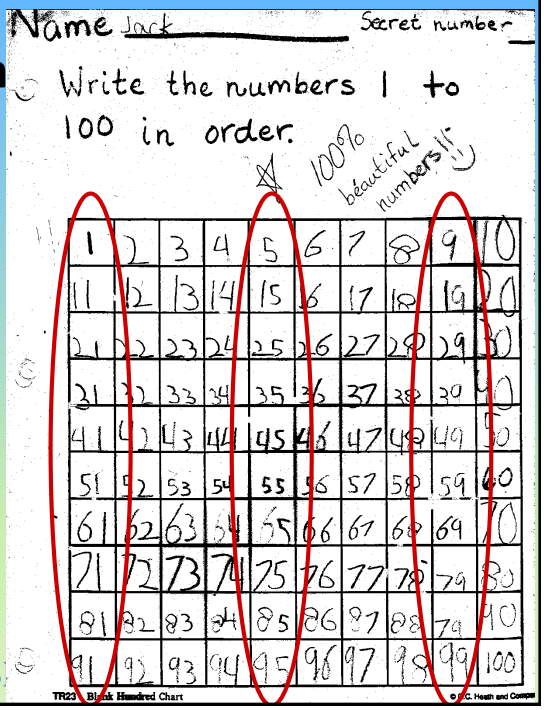
Directions for Items 11–20. These questions ask how well the child or adolescent sees how things go together. They also ask about working with diagrams and understanding how ideas fit together. The questions involve seeing the whole without getting lost in the parts. Please rate how well the child or adolescent visualizes things as a whole.

During the past month, how often did the child or adolescent . . .	Never	Rarely	Sometimes	Frequently	Always
11. like to draw designs?	0	1	2	3	4
12. figure out how parts of a design go together?	0	1	2	3	4
13. classify things into groups correctly?	0	1	2	3	4
14. work well with patterns and designs?	0	1	2	3	4
15. see how objects and ideas are alike?	0	1	2	3	4
16. work well with physical objects?	0	1	2	3	4
17. like to use visual materials?	0	1	2	3	4
18. see the links among several things?	0	1	2	3	4
19. show interest in complex shapes and patterns?	0	1	2	3	4
20. recognize faces easily?	0	1	2	3	4

___ + ___ + ___ + ___ + ___ = ☐
Simultaneous Raw Score

Numbers from 1 to 100

Simultaneous processing facilitated by this work sheet



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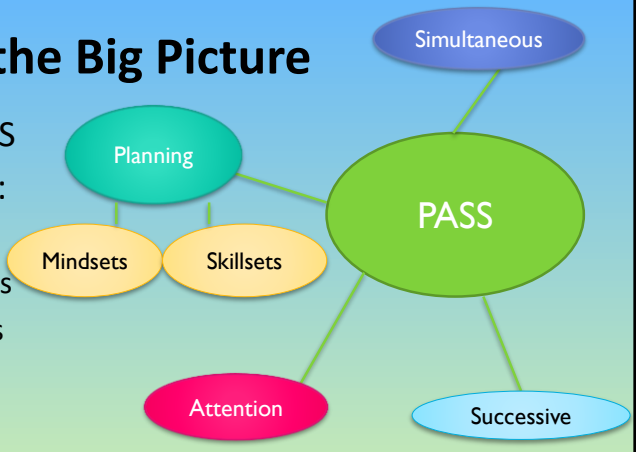
Building the Big Picture

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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Mindful Moment and Self Regulation How's Your Engine Revving?

- Too High? Too Low? Just Right?
- Do you need to energize yourself or calm yourself?
  - Energize: Do an energizing movement or activity
  - Calm: Deep breathing and deep muscle stretches

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Think About It

- What strategies have we used to have you capture BIG IDEAS this week?

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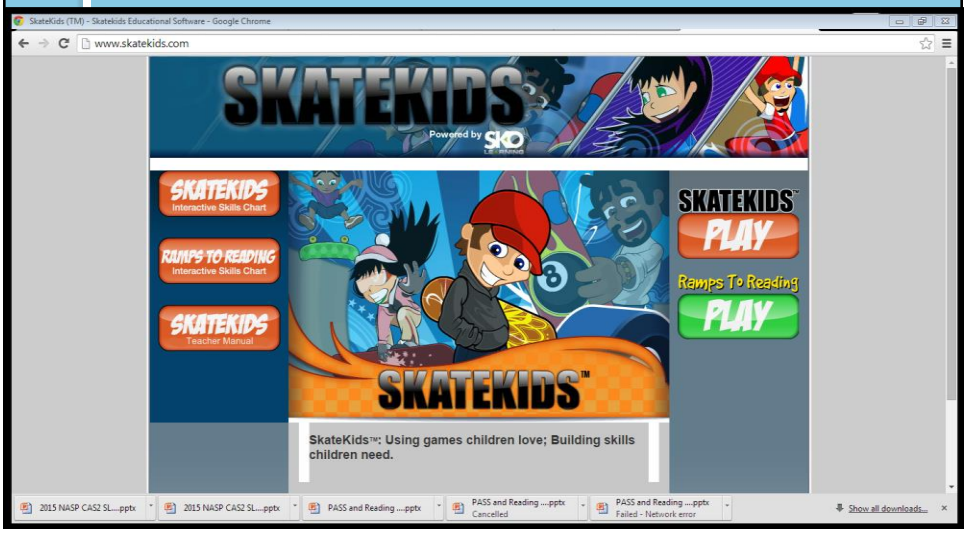
www.Skatekids.com



Two online Reading Programs

- Ramps to Reading (R2R)
  - For ages 4 to 7 years-old.
  - Immerses players in pre-literacy, print, and phonological awareness.
  - 8 different games
- Skatekidsonline (SKO)
  - For ages 7 to 12 years-old.
  - Provides multiple reading levels for practice & skill development.
  - 12 different games

Ramps to Reading (R2R)

- R2R is an online literacy computer program that consists of 8 games embedded in a role-playing setting
- Each child is able to control a character that does things in an imaginary world

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R2R: The Structure

- Each of the games are designed to teach important literacy skills
  - Phonemic Awareness
  - Oral Comprehension
  - Reading Comprehension
- With involvement of important PASS neuropsychological abilities

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Silly Scenes - Simultaneous

Simultaneous and Planning

SKO Games: Gallop Park

- The player is shown a sentence that describes a scene in a park with people and objects.
- A park scene appears with a box of characters and objects the player can drag onto the scene to recreate the scene as described previously.
- If the player makes a mistake, a narrator suggests a strategy for how to remember the details before showing the written description again.
- The player is given three attempts at recreating each scene.

Seeing the Whole: Simultaneous

Take a Look (Visual Chunk)

Post a collection of photographs or charts in various locations around the class that are related to the learning target. For example, geography, landforms, solar system, sentences with varied structures, etc. Group students into partnerships or small groups. Like an art exhibit, have students walk and study the photos without talking.Give them suggestions or a guiding question to focus their observations. Allocate a set amount of time at each exhibit with a timer or using music. When all students have observed all exhibits select a Chew activity for processing what they have seen.

VARIATIONS: You could also post math problems, faces of characters, types of animals…

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Focus Question

What do these pictures tell us about our world, how we connect, the meaning behind the handshakes?

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conclusions


save nola


Franck Fife, AFP


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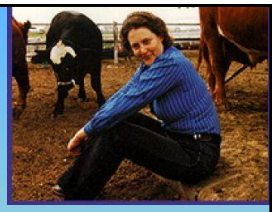
Focus Question

What do these pictures tell us about our world, how we connect, the meaning behind the handshakes?

I Think in Pictures



- I think in pictures. Words are like a second language to me. I translate both spoken and written words into full color movies, complete with sound, which runs like a VCR tape in my head. When someone speaks to me, his words are instantly translated into pictures. Language-based thinkers often find this phenomenon difficult to understand.
  - Temple Grandin, PhD

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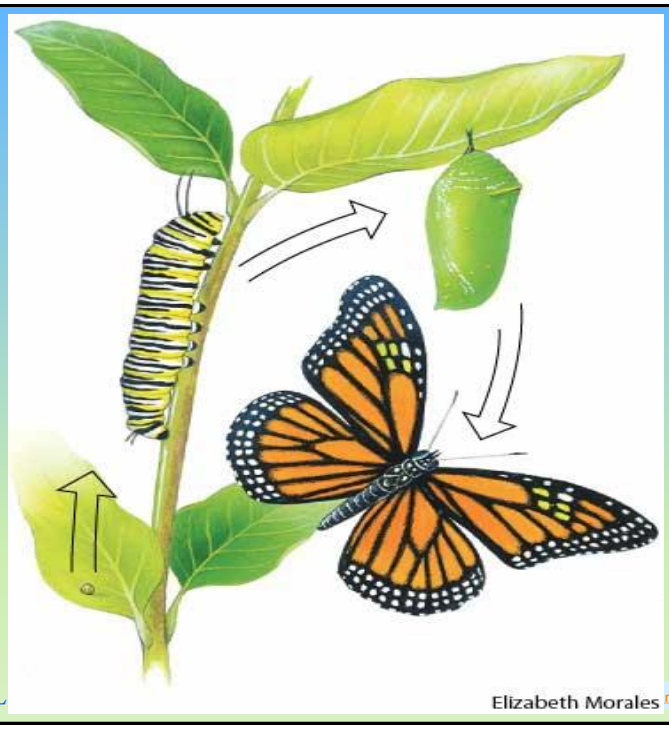

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Elizabeth Morales nclusions


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- Co-plan how you could enhance a lesson with visuals

STOP AND TALK: Talk helps cement learning

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Who's Teaching Summarizatio?

- What skills does it take to be able to summarize?
- How can you make summarization more concrete for your students?
- **Headlines**
- **Twitter/The Gist of It**

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Let's Watch

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www.inspiringlearners.com

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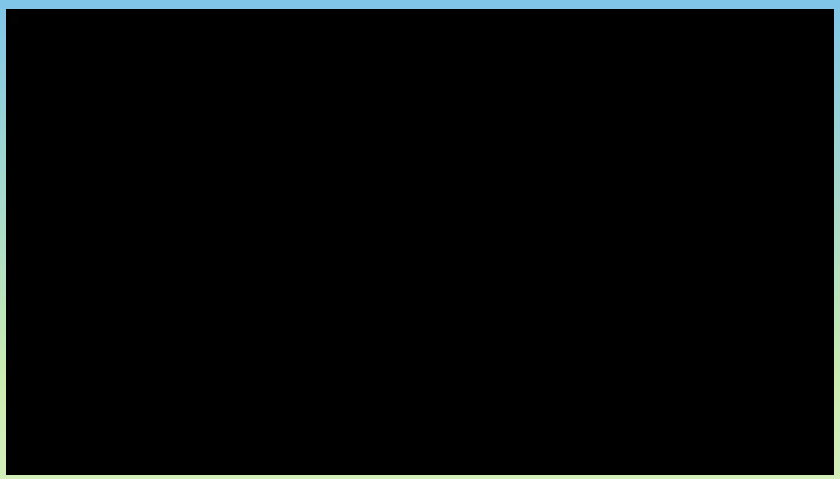
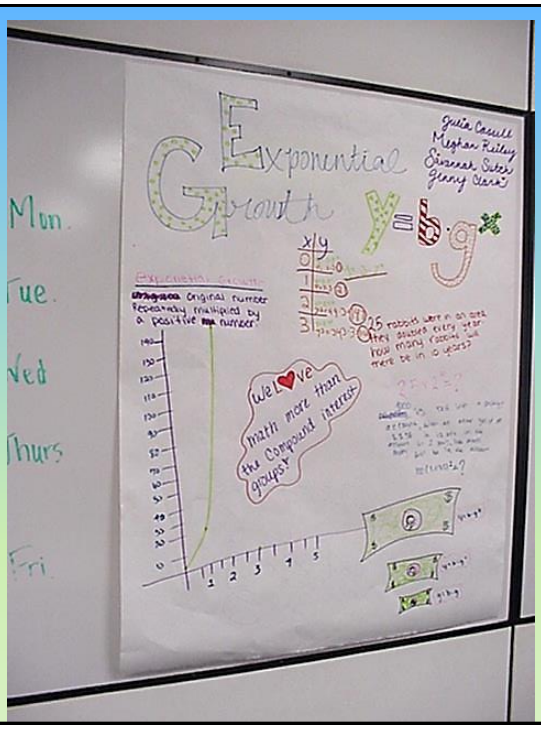
Graphic Organizers



Teaching Students to Own Graphic Organizers

- Teachers need to model and scaffold instruction of graphic organizers and explain WHY they work?
- What is MOST important is that students know what kind of thinking they are doing – compare/contrast, word exploration, etc.
- Graphic organizers are more powerful if they are students created and BIG and ALIVE!
- Students should be able to choose how they organize their thoughts.
- When you know your students, you can differentiate the complexity of the organizers
- Inspiration is a great and easy-to-use graphic organizer computer program



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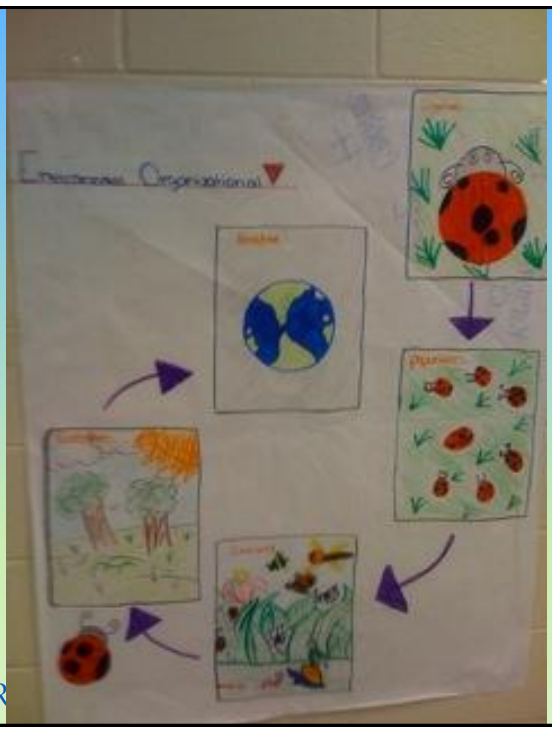

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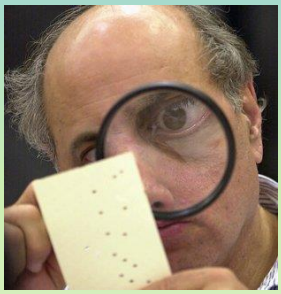
Gallery Walk

- In your core groups, rotate and look at each others maps.
- If there's anything you want to add to your map after looking at each other's, please do so.



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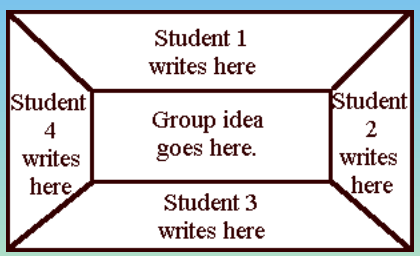
Placemat Thinking



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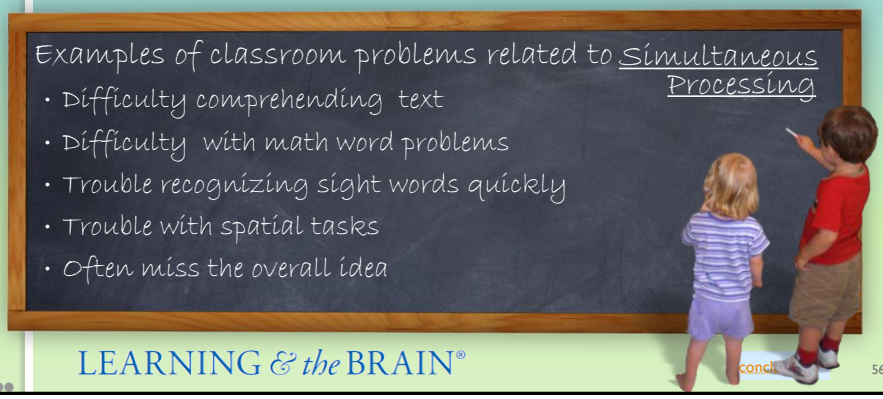
Think About It

- What are some other strategies you have for helping kids see the big idea?

PASS Theory: Simultaneous



How to support low Simultaneous

- How do you help a child with low simultaneous ability?
- Teach students to **HOW TO USE STRATEGIES** that require seeing the whole picture (how things go together)
- Consider Jeremy…

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Case of Nelson (Naglieri & Feifer, 2017)

- Nelson (9 year-old 4th grader) for 3 years
  - difficulty with spelling and written language math facts, and inconsistent with reading comprehending skills.
  - difficulty keeping pace with his peers and often failed to complete his work in a timely manner.
  - The Child Development Team (CDT) recommended a comprehensive psychological evaluation.

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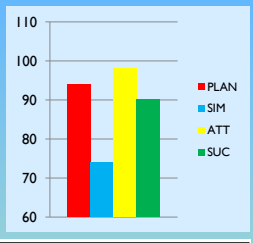
Case of Nelson (Naglieri & Feifer, 2017)



COGNITIVE ASSESSMENT SYSTEM- 2nd EDITION (CAS-2)			
PASS Scales	**SCALED SCORE**	**PERCENTILE**	**ABILITY RANGE**
CAS-2 PLANNING: the ability to apply a strategy, and self-monitor performance while working toward a solution.	**94**	**34%**	**Average**
CAS-2 ATTENTION: the ability to selectively focus on a stimulus while inhibiting responses from competing stimuli.	**98**	**45%**	**Average**
CAS-2 SIMULTANEOUS PROCESSING: the ability to reason and problem solve by integrating separate elements into a conceptual whole, and often requires visual-spatial problem solving skills.	**74**	**4%**	**Very Low**
CAS-2 SUCCESSIVE PROCESSING: the ability to put information into a serial order or particular sequence.	**90**	**25%**	**Average**
CAS-2 TOTAL COMPOSITE SCORE	**89**	**23%**	**Below Average**

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Case of Nelson (Naglieri & Feifer, 2017)

KTEA-III READING SUBTESTS	Age Norms	PERCENTILE	RANGE
Letter & Word Recognition – the student reads isolated letters and words of gradually increasing difficulty.	**81**	**10%**	**Below Average**
Nonsense Word Decoding - the student applies phonics and decoding skills to made up words of increasing difficulty.	**90**	**25%**	**Average**
Reading Comprehension – the student reads a word and point to its corresponding picture or reads a simple instruction and responds by performing the action.	**83**	**13%**	**Below Average**
Silent Reading Fluency – the student is required to read as many statements as possible in two minutes, and must respond either "yes" or "no" as to whether each statement is valid.	**80**	**9%**	**Below Average**
KTEA III READING COMPOSITE SCORE	**81**	**10%**	**Below Average**

FAR index	Standard score (95% CI)	Percentile	Qualitative descriptor
Phonological Index	90	25%	Average
Fluency Index	73	3%	Moderately Below Average
Mixed Index	81	10%	Below Average
Comprehension Index	97)	42%	Average
FAR Total Index	**84**	**14%**	**Below Average**

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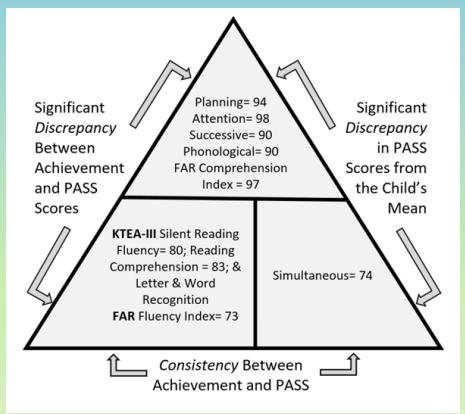
Case of Nelson (Naglieri & Feifer, 2017)

- **Fluency Index** is a significant weakness
- He worked slowly identifying objects and letters, demonstrated poor text orthography skills, and had difficultly reading phonologically irregular words *(i.e. "yacht", "onion", "debt", etc.).*
- These low scores are associated with poor **Simultaneous** processing -- an inability to visualize the word as a unique whole.
  - This can lead to inconsistent spelling, as well as slower reading.

Case of Nelson (Naglieri & Feifer, 2017)

- Nelson's history of reading problems and interventions to address this, slower reading speed, difficulty reading phonetically irregular words, and poor **Simultaneous** processing provides evidence of a Specific Learning Disability as a student with Surface Dyslexia.



Fluency Intervention: Read Naturally

- A fluency based program designed to develop speed, accuracy, and proper expression.
- Designed to be used 3 times per week…30 minutes, mainly for students between 2nd (51wpm) though 8th (133 wpm) grades.
- Each level of the program has 24 non-fiction stories.
- Student placed in level and goal is set.
- Cold read for one minute graphing wpm and identifying difficult words.
- Read with tape three times consecutively.
- Hot read is attempted.
- Comprehension questions involve main idea, details, vocabulary, inferences, & short answers.

- Brain break

Do Interpretation here

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Description of Standard Scores

- The average standard score is 100 (SD = 15)
- The Scores can be described as …

Table 2.1 Descriptive Terms That Correspond to CAS2: Rating Scale Scores

Total score	Descriptive term	Percentage included in normal distribution
≥130	Very Superior	2.2
120–129	Superior	6.7
110–119	Above Average	16.1
90–109	Average	50.0
80–89	Below Average	16.1
70–79	Poor	6.7
<70	Very Poor	2.2

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Compare PASS Scores

- Determine strengths and weaknesses in PASS scores by comparing them to the child's average

Table C.1 Differences Needed for Significance Between Each PASS Score and the Student's Mean PASS Score by Age for the CAS2: Rating Scale

Age (in years)	*p* value	Planning	Simultaneous	Attention	Successive
	.05	9.9	11.5	9.4	12.0
5–7	.10	8.9	10.3	8.5	10.8
	.05	9.1	10.8	11.3	11.8
8–18	.10	8.2	9.7	10.1	10.6

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Determining Strengths & Weaknesses

- Calculate the average of the four PASS scores
- Subtract the mean from each of the PASS scores
- Compare the difference scores to the values in Table C.1 in Appendix C.
  - When the difference score is equal to or greater than the tabled values, the score differs significantly from the child's average PASS standard score.
  - A positive difference score indicates that the PASS score is above the mean, and a negative number indicates that it is below the mean.
- To be a Strength or Weakness A PASS scores must be
  - significantly different from the student's PASS mean AND
  - the score must be below 90 to be a weakness
  - above 109 to be a strength

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Example of PASS Differences

Section 5. PASS Scale Comparisons

Compare each PASS Scale standard score to the student's mean PASS score using Tables C.1 and C.2 of the Examiner's Manual.

	Standard Score	*d* value		circle .05 .10	% in sample
Planning	95	-3.8	S W	Sig (NS)	68.0
Simultaneous	115	16.2	(S) W	(Sig) NS	10.8
Attention	100	1.2	S W	Sig (NS)	96.3
Successive	85	-13.8	S (W)	(Sig) NS	16.9
PASS mean	98.8				

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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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PASS Assessing and Planning

- Work with your "Child Study Team" aka as Core Group Members.
  - Analyze your students CAS Rating Scale Score
  - Determine areas of strength and challenge
  - Develop a PASS Plan for your students using the Intervention Protocol.

Performance Across Race, Ethnicity, Culture and Language

We must use tests that
are fair to minority groups

Which Ability tests are Non-Discriminatory?

non discriminatory assessments

"(3) ADDITIONAL REQUIREMENTS.—Each local educational agency shall ensure that—

"(A) assessments and other evaluation materials used to assess a child under this section—

"(i) are selected and administered so as not to be discriminatory on a racial or cultural basis;

"(ii) are provided and administered in the language and form most likely to yield accurate information on what the child knows and can do academically, developmentally, and functionally, unless it is not feasible to so provide or administer;

"(iii) are used for purposes for which the assessments or measures are valid and reliable;

"(iv) are administered by trained and knowledgeable personnel; and

"(v) are administered in accordance with any instructions provided by the producer of such assessments;

"(B) the child is assessed in all areas of suspected disability;

"(C) assessment tools and strategies that provide relevant information that directly assists persons in determining the educational needs of the child are provided;

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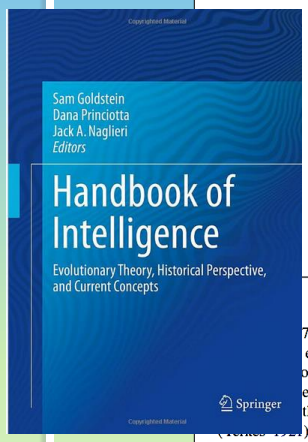
Mean Differences by Test

http://www.jacknaglieri.com/cas2.html



20

Hundred Years of Intelligence Testing: Moving from Traditional IQ to Second-Generation Intelligence Tests

Jack A. Naglieri

"Do not go where the path may lead, go instead where there is no path and leave a trail."

–Ralph Waldo Emerson

7, is remembered as the day the entered World War I. On that same of psychologists held a meeting in ersity's Emerson Hall to discuss the they could play with the war effort). The group agreed that psychological knowledge and methods could be of importance to the military and utilized to increase the efficiency of the Army and Navy personnel. The group included Robert Yerkes, who was also the president of the American Training School in Vineland, New Jersey, on May 28. The committee considered many types of group tests and several that Arthur S. Otis developed when working on his doctorate under Lewis Terman at Stanford University. The goal was to find tests that could efficiently evaluate a wide variety of men, be easy to administer in the group format, and be easy to score. By June 9, 1917, the materials were ready for an initial trial. Men who had some educational background and could speak English were administered the verbal and quantitative (Alpha) tests and those that could not read the newspaper or speak English were given the Beta tests (today described as nonverbal).

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Table 20.1 Mean score differences in standard scores by race on traditional IQ and second-generation intelligence tests

Test	Difference
Traditional	
SB-IV (matched)	12.6
WISC-IV (normative sample)	11.5
WJ-III (normative sample)	10.9
WISC-IV (matched)	10.0
Second generation	
KABC (normative sample)	7.0
KABC (matched)	6.1
KABC-2 (matched)	5.0
CAS2 (normative sample)	6.3
CAS (demographic controls)	4.8
CAS2 (demographic controls)	4.3

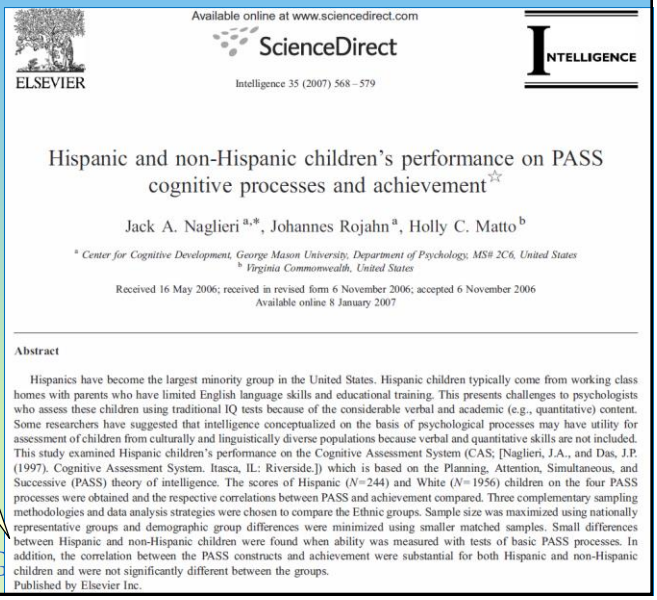
PASS psychological processes measured by CAS and CAS2 yield the smallest difference

LEA

Naglieri, Rojahn, Matto (2007)

Hispanic White difference on CAS Full Scale of 4.8 standard score points (matched)

LEARNING



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Intelligence 35 (2007) 568–579

INTELLIGENCE

Hispanic and non-Hispanic children's performance on PASS cognitive processes and achievement☆

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Received 16 May 2006; received in revised form 6 November 2006; accepted 6 November 2006
Available online 8 January 2007

Abstract

Hispanics have become the largest minority group in the United States. Hispanic children typically come from working class homes with parents who have limited English language skills and educational training. This presents challenges to psychologists who assess these children using traditional IQ tests because of the considerable verbal and academic (e.g., quantitative) content. Some researchers have suggested that intelligence conceptualized on the basis of psychological processes may have utility for assessment of children from culturally and linguistically diverse populations because verbal and quantitative skills are not included. This study examined Hispanic children's performance on the Cognitive Assessment System (CAS; [Naglieri, J.A., and Das, J.P. (1997). Cognitive Assessment System. Itasca, IL: Riverside.]) which is based on the Planning, Attention, Simultaneous, and Successive (PASS) theory of intelligence. The scores of Hispanic (N=244) and White (N=1956) children on the four PASS processes were obtained and the respective correlations between PASS and achievement compared. Three complementary sampling methodologies and data analysis strategies were chosen to compare the Ethnic groups. Sample size was maximized using nationally representative groups and demographic group differences were minimized using smaller matched samples. Small differences between Hispanic and non-Hispanic children were found when ability was measured with tests of basic PASS processes. In addition, the correlation between the PASS constructs and achievement were substantial for both Hispanic and non-Hispanic children and were not significantly different between the groups.
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Hispanic ELL Students with Reading Problems

LEARNING & the BRAIN®

conclusions

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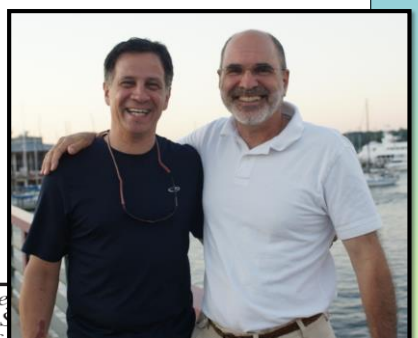
Hispanic ELL Students with Reading Problems

http://www.jacknaglieri.com/cas2.html

Bilingual Hispanic Children's Performance on the English and Spanish Versions of the Cognitive Assessment System

Jack A. Naglieri
George Mason University
Tulio Otero
Columbia College, Elgin Campus
Brianna DeLauder
George Mason University
Holly Matto
Virginia Commonwealth University



This study compared the performance of re on the Planning, Attention, Simultaneous, S sured by English and Spanish versions of (CAS; Naglieri & Das, 1997a). The results suggest that students scored similarly on both English and Spanish versions of the CAS. Within each version of the CAS, the bilingual children earned their lowest scores in Successive processing regardless of the language used during test administration. Small mean differ-

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English Spanish CAS

Means, *SD*s, *d*-ratios, Obtained and Correction Correlations Between the English a
Spanish Version of the CAS (*N* = 55).

	CAS English		CAS Spanish		*d*-ratio	Correlations	
	Mean	*SD*	Mean	*SD*	*d*	Obtained	Corrected
Planning	92.6	13.1	92.6	13.4	.00	.96	.97
Simultaneous	89.0	12.8	93.0	13.7	-.30	.90	.93
Attention	94.8	13.9	95.1	13.9	-.02	.98	.98
Successive	78.0	13.1	83.1	12.6	-.40	.82	.89
Full Scale	84.6	13.6	87.6	13.8	-.22	.96	.97

LEARNI & *the* BR IN® J. A. Naglieri, Ph.D. conclusions 79

Otero, Gonzales, Naglieri (2012)

SLD and PASS scores

APPLIED NEUROPSYCHOLOGY: CHILD, 0: 1–9, 2012

ISSN: 2162-2965 print/2162-2973 online
DOI: 10.1080/21622965.2012.670547
Psychology Press Taylor & Francis Group

The Neurocognitive Assessment of Hispanic English-Language Learners With Reading Failure

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TABLE 2
Means, Standard Deviations, *d* Ratios, and Correlations Between the English and Spanish Versions of the Cognitive Assessment System (*N* = 40)

	CAS English		*CAS Spanish*			*Correlations*	
CAS Subtests and Scales	*M*	*SD*	*M*	*SD*	*d* ratio	*Obtained*	*Corrected*
Full Scale	86.40	8.73	87.10	7.94	–0.08	.936	.993

CAS in Italy

Psychological Assessment

1040-3590/12/$12.00 DOI: 10.1037/a0029828

Multigroup Confirmatory Factor Analysis of U.S. and Italian Children's Performance on the PASS Theory of Intelligence as Measured by the Cognitive Assessment System

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Stefano Taddei
University of Florence

Kevin Williams
Multi-Health Services, Toronto, Ontario, Canada

ined Italian and U.S. children's performance on the English and Italian versions, e Cognitive Assessment System (CAS; Naglieri & Conway, 2009; Naglieri & Das, d on a neurocognitive theory of intelligence entitled PASS (Planning, Attention, l Successive; Naglieri & Das, 1997; Naglieri & Otero, 2011). CAS subtest, PASS ale scores for Italian (N = 809) and U.S. (N = 1,174) samples, matched by age and mined. Multigroup confirmatory factor analysis results supported the configural CAS factor structure between Italians and Americans for the 5- to 7-year-old error of approximation [RMSEA] = .038; 90% confidence interval [CI] = .033, .043; lex [CFI] = .96) and 8- to 18-year-old (RMSEA = .036; 90% CI = .028, .043; CFI = he Full Scale standard scores (using the U.S. norms) for the Italian (100.9) and U.S. ere nearly identical. The scores between the samples for the PASS scales were very the Attention Scale (d = 0.26), where the Italian sample's mean score was slightly mean differences were found for 9 of the 13 subtest scores, 3 showed small d-ratios talian sample), and 1 was large (in favor of the U.S. sample), but some differences in vere found. These findings suggest that the PASS theory, as measured by CAS, yields s and showed factorial invariance for these samples of Italian and American children, tural and linguistic characteristics.

US and Italian Samples– Mean Scores

Table 5

Means and SDs for Italian Children (N = *809) on the CAS Subtests and PASS and Full Scales Using U.S. Norms and Comparisons to U.S. Sample* (N = *1,174), Matched by Age*

Subtests and scales	Italian			U.S.					
	M	*SD*	*n*	*M*	*SD*	*n*	*F*	*p*	*d*-ratio
CAS composite scales									
Planning	97.7	13.4	809	100.5	15.4	1,174	18.1	<.01	−0.19
Simultaneous	103.0	13.9	809	101.1	14.1	1,174	9.3	<.01	0.14
Attention	104.2	13.7	809	100.6	14.4	1,174	32.2	<.01	0.26
Successive	99.0	12.5	809	100.5	14.5	1,174	5.1	.02	−0.11
Full Scale	100.9	12.9	809	100.5	14.8	1,174	2.3	.13	0.03

Note. CAS = Cognitive Assessment Syst SS = Planning, Attention, Simultaneous, and Successive. U.S. sample *N*s vary due Designations for *d*-ratios are as follows <.2), S = small (.2), M = medium (.5), and L = large (.8). For all F values the dfs a for Speech Rate (1, 1219) and Se 762).

Italian mean = 100.9 &US mean = 100.5 using US NORMS

Sex Differences in Executive Function

Sex Differences: Ability

Journal of Educational Psychology
2001, Vol. 93, No. 2, 430–437

0022-0663/01/$5.00 DOI: 10.1037//0022-0663.93.2.430

Gender Differences in Planning, Attention, Simultaneous, and Successive (PASS) Cognitive Processes and Achievement

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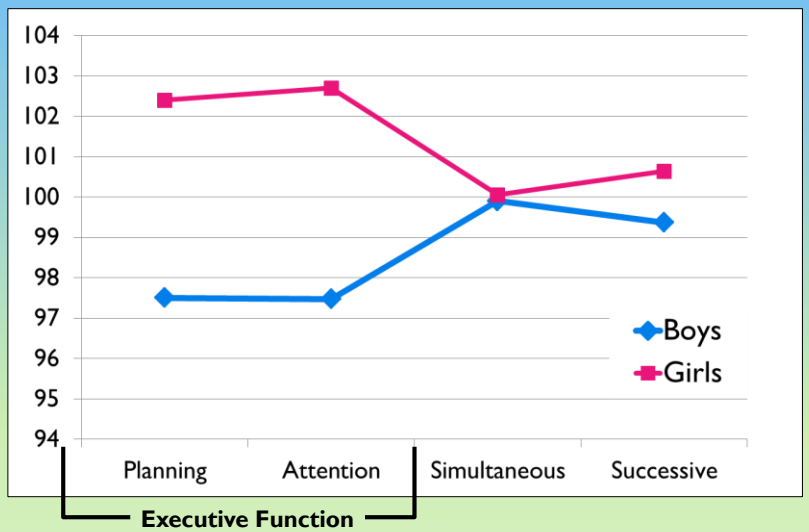
George Mason University

Johannes Rojahn
Ohio State University

Gender differences in ability and achievement have been studied for some time and have been conceptualized along verbal, quantitative, and visual–spatial dimensions. Researchers recently have called for a theory-based approach to studying these differences. This study examined 1,100 boys and 1,100 girls who matched the U.S. population using the Planning, Attention, Simultaneous, Successive (PASS) cognitive-processing theory, built on the neuropsychological work of A. R. Luria (1973). Girls outperformed boys on the Planning and Attention scales of the Cognitive Assessment System by about 5 points (d = .30 and .35, respectively). Gender differences were also found for a subsample of 1,266 children on the Woodcock–Johnson Revised Tests of Achievement Proofing (d = .33), Letter–Word Identification (d = .22), and Dictation (d = .22). The results illustrate that the PASS theory offers a useful way to examine gender differences in cognitive performance.

Sex Differences: Ability



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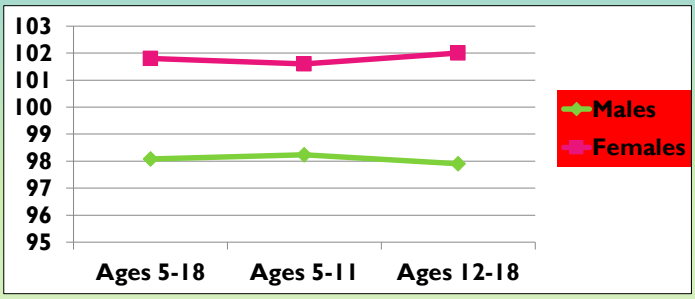
CEFI Sex Differences: Parent Raters

- Girls are Smarter than Boys

Parents	N	Mn	SD	N	Mn	SD	ES
Ages 5-18	700	**98.1**	14.9	699	**101.8**	15.0	**-0.25**
Ages 5-11	350	**98.2**	14.3	349	**101.6**	15.6	**-0.22**
Ages 12-18	350	**97.9**	15.4	350	**102.0**	14.4	**-0.28**



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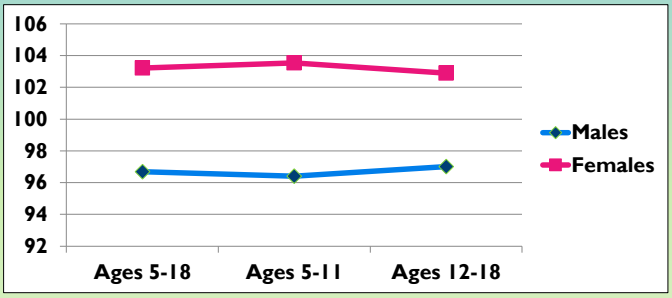
CEFI Sex Differences: Teacher Raters

- Girls are Smarter than Boys

Teachers	N	Mn	SD	N	Mn	SD	ES
Ages 5-18	700	**96.7**	14.4	700	**103.2**	15.0	**-0.44**
Ages 5-11	350	**96.4**	14.5	350	**103.5**	14.9	**-0.49**
Ages 12-18	350	**97.0**	14.4	350	**102.9**	15.0	**-0.40**



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Sex Differences: Social Emotional

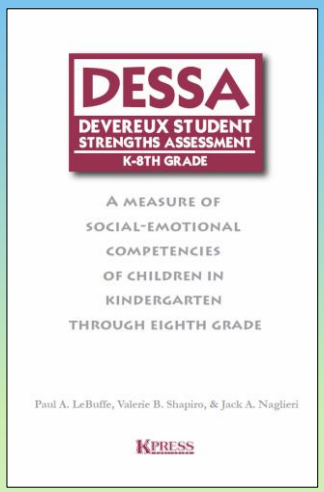

TABLE 2.6

Means, SDs, Ns and *d*-ratios for DESSA *T*-Scores by Gender

	Males			Male Female *d*-ratio	Females		
	Mean	*SD*	*n*		*Mean*	*SD*	*n*
TEACHER RATERS							
Personal Responsibility	48.23	9.98	631	-0.42	52.28	9.30	611
Optimistic Thinking	48.97	10.14	627	-0.30	51.88	9.47	612
Goal-Directed Behavior	48.60	10.05	631	-0.33	51.80	9.38	611
Social-Awareness	48.58	10.13	630	-0.31	51.66	9.64	612
Decision Making	48.44	10.08	631	-0.37	52.05	9.32	612
Relationship Skills	48.36	10.04	630	-0.41	52.33	9.30	612
Self-Awareness	49.05	10.28	631	-0.22	51.17	9.36	611
Self-Management	48.32	10.02	631	-0.39	52.02	9.18	612
Social-Emotional Composite	48.30	10.09	625	-0.38	51.93	9.02	609
PARENT RATERS							
Personal Responsibility	48.14	9.52	602	-0.36	51.66	9.87	641
Optimistic Thinking	48.37	9.86	602	-0.33	51.62	9.82	641
Goal-Directed Behavior	47.92	9.51	602	-0.41	51.90	9.96	641
Social-Awareness	48.71	9.75	602	-0.25	51.10	9.71	641
Decision Making	48.56	9.76	602	-0.29	51.41	9.62	641
Relationship Skills	48.40	9.72	602	-0.33	51.65	9.90	641
Self-Awareness	48.40	10.03	602	-0.32	51.54	9.51	641
Self-Management	48.80	9.98	602	-0.27	51.51	9.94	641
Social-Emotional Composite	48.24	9.51	602	-0.37	51.77	9.60	641

Devereux Elementary Student Strength Assessment (DESSA, LeBuffe Shapiro & Naglieri, 2009)

LEARNING & the BRAIN®

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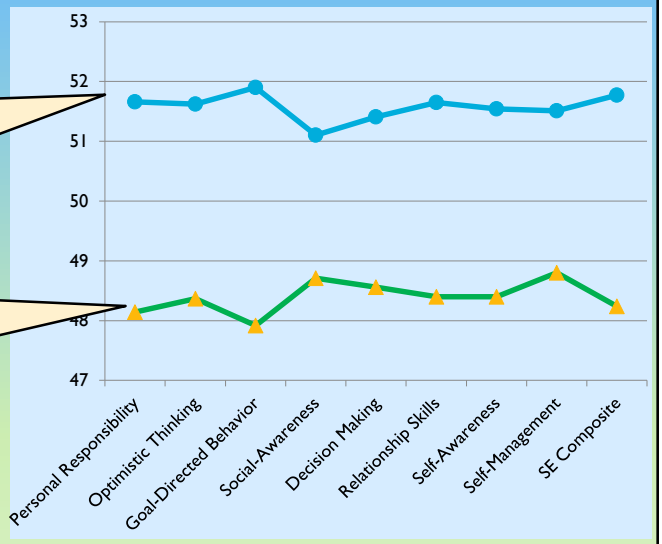
Sex Differences: Social Emotional

Teacher Raters Females

Teacher Raters Males



Notes:
N = 2,477
DESSA values are T-scores (Mn= 50, SD = 10).

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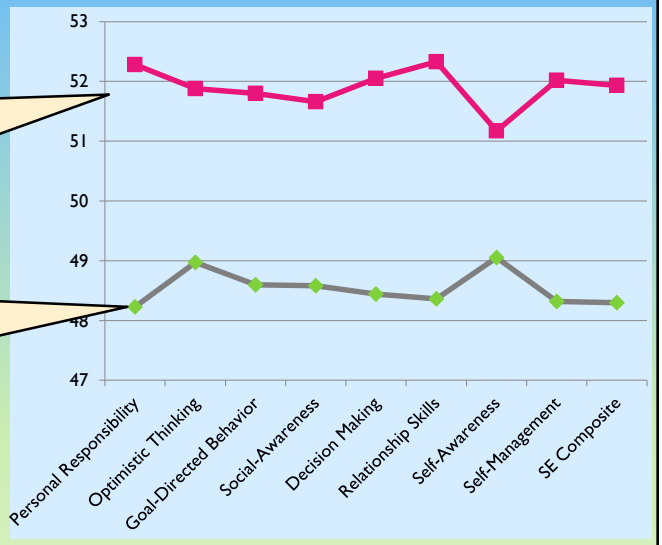
Sex Differences: Social Emotional

Parent Raters Females

Parent Raters Males



Notes:
N = 2,477
DESSA values are T-scores (Mn= 50, SD = 10).

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Sex Differences

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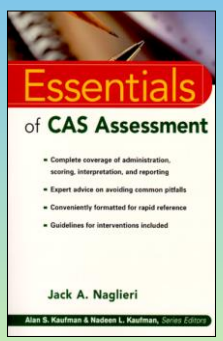
Which test correlate highest with Achievement?

- IQ scores correlate about .5 to .55 with achievement test scores (Brody, 1992)
- But traditional tests have achievement in them
- Naglieri (1999) summarized the correlations between several tests and achievement test scores and found that the CAS correlated higher with achievement than the WISC-III, WJ-R, DAS and KABC



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Correlations with Achievement

- Correlations between ability & achievement tests show the strength of measuring basic psychological processes

Note: All correlations are reported in the ability tests' manuals. Values per scale were averaged within each ability test using Fisher z transformations.

Correlations Between Ability and Achievement Test Scores			Average Correlation: All Scales	Average Correlation: Scales without achievement
WISC-V	Verbal Comprehension	.74		
WIAT-III	Visual Spatial	.46		
N = 201	Fluid Reasoning	.40		
	Working Memory	.63		
	Processing Speed	.34	.53	.47
WJ-IV COG	Comprehension Knowledge	.50		
WJ-IV ACH	Fluid Reasoning	.71		
N = 825	Auditory Processing	.52		
	Short Term Working Memory	.55		
	Cognitive Processing Speed	.55		
	Long-Term Retrieval	.43		
	Visual Processing	.45	.54	.50
KABC	Sequential/Gsm	.43		
WJ-III ACH	Simultaneous/Gv	.41		
N = 167	Learning/Glr	.50		
	Planning/Gf	.59		.48
	Knowledge/GC	.70	.53	
CAS	Planning	.57		
WJ-III ACH	Simultaneous	.67		
N=1,600	Attention	.50		
	Successive	.60	.59	

Note: WJ-IV Scales Comp-Know= Vocabulary and General Information; Fluid Reasoning = Number Se… Concept Formation; Auditory Processing = Phonological processing.

Jana's Case - Melissa

Composite Score Summary

Composite		Strength or Weakness	Composite Score	Percentile Rank
Verbal Comprehension	VCI	S	113	81
Visual Spatial	VSI		94	34
Fluid Reasoning	FRI		97	42
Working Memory	WMI		94	34
Processing Speed	PSI	W	86	18
Full Scale IQ	FSIQ		95	37

Jana's Case - Melissa

	PLAN	SIM	ATT	SUC	FS
PASS Composite Index Scores	74	102	80	93	83
Percentile Rank	4	55	9	32	13

PASS Scale Comparisons

	Index Score	d value	Sig/ NS	Strength Weakness	% in sample
Planning	74	-13.3	Sig	W	15.1
Simultaneous	102	14.7	Sig		12.3
Attention	80	-7.3	NS		46.0
Successive	93	5.7	NS		55.6
PASS Mean	87.3				

Jana's Case - Melissa

TABLE OF SCORES
Woodcock-Johnson IV Tests of Achievement Form

CLUSTER/Test	SS (95% Band)
READING	102 (95-109)
Letter-Word Identification	108 (100-116)
Passage Comprehension	94 (84-105)
BROAD READING	100 (94-106)
Letter-Word Identification	108 (100-116)
Passage Comprehension	94 (84-105)
Sentence Reading Fluency	98 (89-107)
BASIC READING SKILLS	104 (97-112)
Letter-Word Identification	108 (100-116)
Word Attack	99 (88-109)
READING COMPREHENSION	92 (84-100)
Passage Comprehension	94 (84-105)
Reading Recall	91 (82-100)
READING FLUENCY	99 (92-106)
Oral Reading	101 (92-111)
Sentence Reading Fluency	98 (89-107)
MATHEMATICS	117 (110-124)
Applied Problems	123 (113-132)
Calculation	111 (102-120)
BROAD MATHEMATICS	107 (101-114)
Applied Problems	123 (113-132)
Calculation	111 (102-120)
Math Facts Fluency	89 (80-98)
MATH CALCULATION SKILLS	99 (93-105)
Calculation	111 (102-120)
Math Facts Fluency	89 (80-98)
WRITTEN LANGUAGE	113 (106-121)
Spelling	108 (99-116)
Writing Samples	115 (106-125)
BROAD WRITTEN LANGUAGE	110 (103-118)
Spelling	108 (99-116)
Writing Samples	115 (106-125)
Sentence Writing Fluency	97 (86-109)

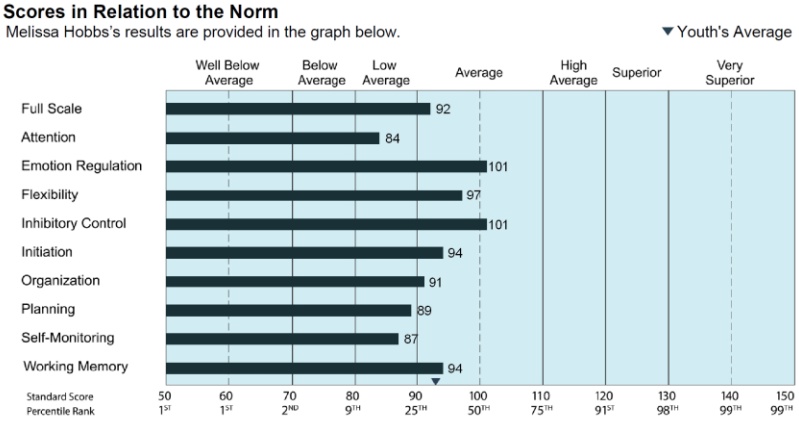
Jana's Case -

CLUSTER/Test	SS (95% Band)
WRITTEN EXPRESSION	109 (100-119)
Writing Samples	115 (106-125)
Sentence Writing Fluency	97 (86-109)
ACADEMIC SKILLS	110 (104-116)
Letter-Word Identification	108 (100-116)
Spelling	108 (99-116)
Calculation	111 (102-120)
ACADEMIC FLUENCY	94 (88-101)
Sentence Reading Fluency	98 (89-107)
Math Facts Fluency	89 (80-98)
Sentence Writing Fluency	97 (86-109)
ACADEMIC APPLICATIONS	114 (107-121)
Applied Problems	123 (113-132)
Passage Comprehension	94 (84-105)
Writing Samples	115 (106-125)
BRIEF ACHIEVEMENT	115 (109-121)
Letter-Word Identification	108 (100-116)
Applied Problems	123 (113-132)
Spelling	108 (99-116)
BROAD ACHIEVEMENT	106 (101-111)
Letter-Word Identification	108 (100-116)
Applied Problems	123 (113-132)
Spelling	108 (99-116)
Passage Comprehension	94 (84-105)
Calculation	111 (102-120)
Writing Samples	115 (106-125)
Sentence Reading Fluency	98 (89-107)
Math Facts Fluency	89 (80-98)
Sentence Writing Fluency	97 (86-109)

Overview of Results for Melissa

Scores in Relation to the Norm

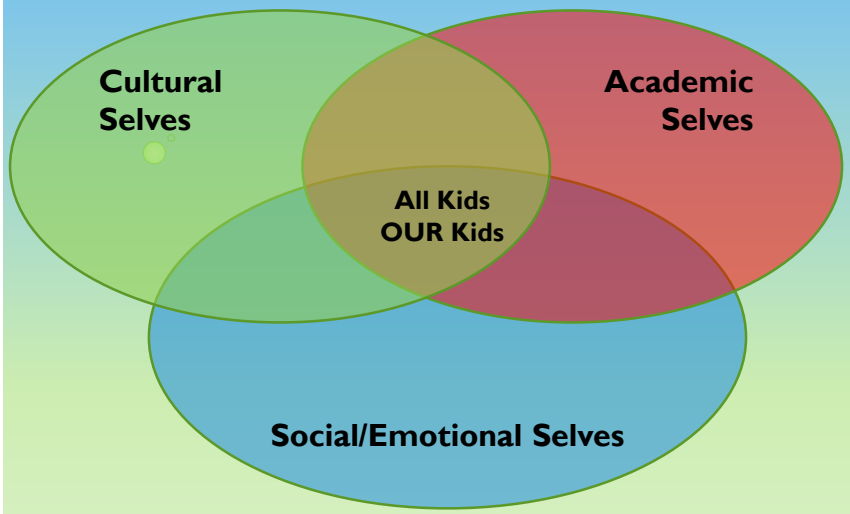
Melissa Hobbs's results are provided in the graph below.



- The more we understand the BIG PICTURE of how the brain works, the more we can take the intentional STEPS we need to help our students PAY ATTENTION to what they want and PLAN to SUCCEED, as life-long thinkers and learners.

L RAIN®

A THINK SMART CLASSROOM



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conclusions

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Six Learning Foundations that Work for ALL Learners

- Safe Environment
- Routines and Procedures
- Growth Mindsets
- Student Talk
- Student and Teacher Self Reflection
- Mindfulness

PASS and Social Emotional

- Expert Groups
  - Planning
  - Attention
  - Successive
  - Simultaneous

Your Final Project for This Week

- 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

LEARNING & the BRAIN®

conclusions

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Teach Kids to Think Smart!

Teaching's tough, believe me missy,
No one wants to be a sissy.
Want to teach with vim and verve
But instead our hearts are racing,
Too much RTI and Pacing
If we only had the nerve.

If we choose to do good teaching,
Teach strategies, no preaching,
Our students we could train
To be deep and worthy thinkers
Not behavior problem, stinkers,
Yep, we'll have to use our brain.

Oh, now we know the tricks
To make our kids brains tick
They need lots of time to truly be engaged
They need to CHEW,
Then learning sticks!

Now you're working on your Mindsets
And building some new Skill Sets
It's time for you to start…
Using PASS because you know it
As you practice you will grow it
Time to teach kids to Think Smart!

LEARNING & the BRAIN®

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PASS is about LIFE not just school

- Tell me and I forget. Teach me and I remember. Involve me and I learn.
  - Benjamin Franklin –

It's been an honor and a pleasure!

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

It's a Tough Climb

LEARNING & the BRAIN®

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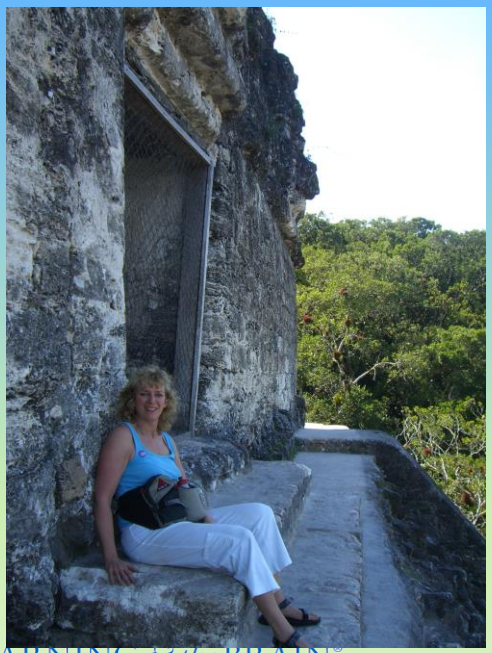

You May Be Scared

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Find a Colleague Who's Not

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If you look over the edge, with a friend…

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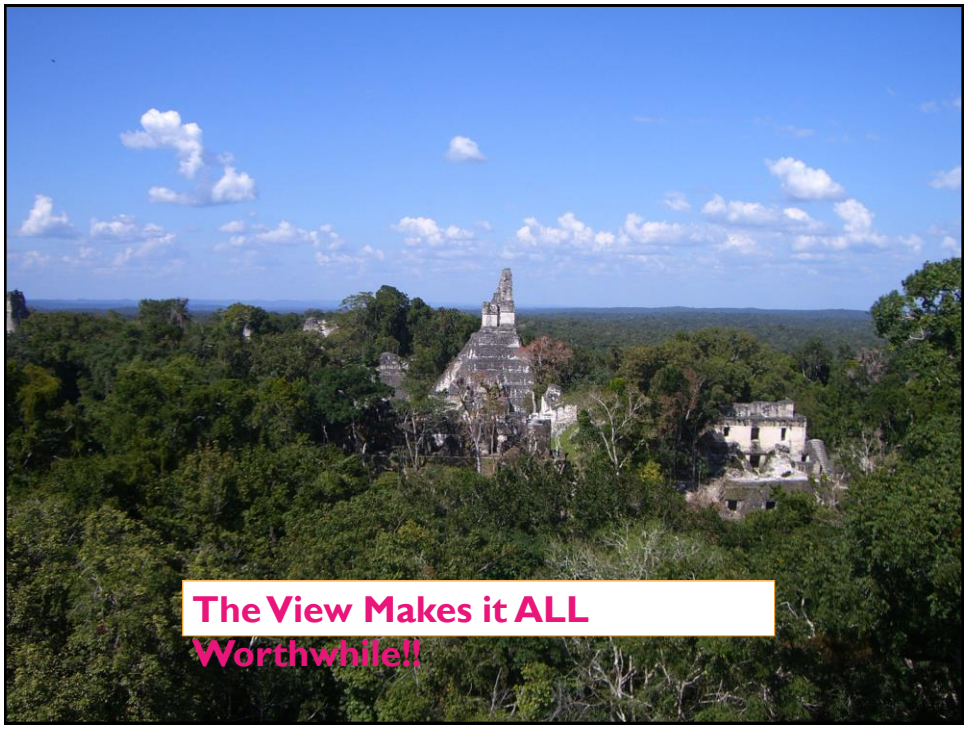
The View Makes it ALL Worthwhile!!