

Introducing the WISC-V Integrated  
Gloria Maccow, Ph.D., Assessment Training Consultant



---

---

---

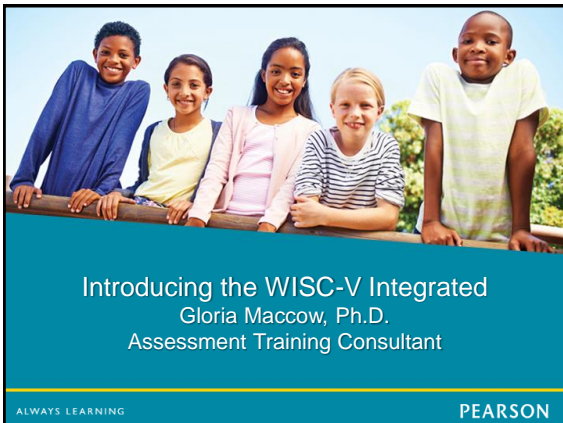
---

---

---

---

---



---

---

---

---


---

---

---

---

**Objectives**



1. Describe process-oriented assessment.
2. Describe WISC-V Integrated.
3. Illustrate clinical utility of WISC-V Integrated.

ALWAYS LEARNING PEARSON

---

---

---

---

---

---


---

---

# Introducing the WISC-V Integrated

Gloria Maccow, Ph.D., Assessment Training Consultant

## Purpose of WISC-V Integrated



1. Assess cognitive and problem-solving processes (ages 6:0–16:11).
2. Help clinicians understand how examinee learns.
3. Facilitate interpretation of low scores on WISC-V.

ALWAYS LEARNING PEARSON

---

---

---

---


---

---

---

---

## What is WISC-V Integrated?



WISC-V Integrated:  
Process-Oriented Assessment

ALWAYS LEARNING PEARSON

---

---

---


---

---

---

---

---



## Process-Oriented Assessment

ALWAYS LEARNING PEARSON

---

---

---

---

---


---

---

---

# Introducing the WISC-V Integrated

Gloria Maccow, Ph.D., Assessment Training Consultant

**Everything Old is New Again . . .** 

Careful, systematic observation of a child's problem-solving strategy (*process*) can yield richer and more useful information about cognitive functioning than simple right-wrong scoring of their final solution (*product*).

Heinz Werner. (1937). *Process and Achievement: A Basic Problem of Education and Developmental Psychology*.

ALWAYS LEARNING **PEARSON**

---

---

---


---

---

---

---

---

**Boston Process Approach** 

Edith Kaplan

Qualitative Evaluation of Test Performance	Quantitative Evaluation of Scores
--	-----------------------------------

1988

ALWAYS LEARNING **PEARSON**

---

---

---


---

---

---

---

---

**Utility of Process Scores** 

1. Provide additional information about subtest performance.
2. Enhance depth of interpretation and understanding of performance.
3. Facilitate understanding of scores from a process approach perspective.

ALWAYS LEARNING **PEARSON**

---

---

---

---

---

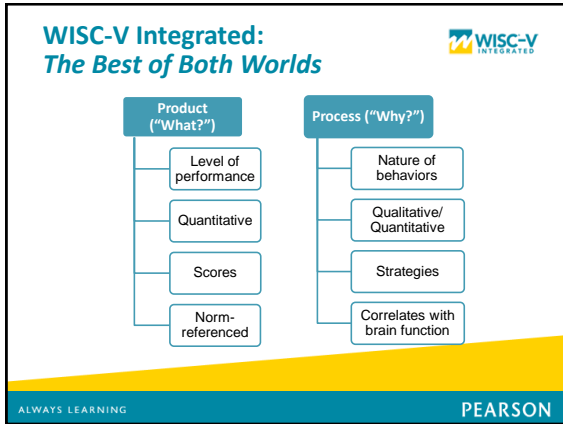
---

---

---

# Introducing the WISC-V Integrated

Gloria Maccow, Ph.D., Assessment Training Consultant



---

---

---

---

---

---

---

---

### Assumptions of the Process-Oriented Approach

Any one factor – or a combination of factors – may contribute to a child’s performance on a task.

Cognitive tests are multi-factorial

ALWAYS LEARNING PEARSON

---

---

---

---

---

---

---

---

### Assumptions of the Process-Oriented Approach

Process-oriented approach attempts to identify cognitive sub-processes contributing to score.

E.g., for Vocabulary:

- Receptive language problem - Difficulty understanding directions, stimulus words
- Lack of word knowledge
- Difficulty accessing mental lexicon - Problems with retrieval from long-term storage
- Expressive language problem

ALWAYS LEARNING PEARSON

---

---

---

---

---

---

---

---

# Introducing the WISC-V Integrated

Gloria Maccow, Ph.D., Assessment Training Consultant

**Vocabulary**

<b>Barbara</b> Scaled Score = 5 Lacks semantic knowledge: Does not know what words mean	<b>Joseph</b> Scaled Score = 5 Expressive language problem: Knows word meanings, but cannot produce the words to express his knowledge
---	--

Process-Oriented Approach to Interpretation

ALWAYS LEARNING PEARSON

---

---

---

---

---

---

---

---

**Block Design**

<b>Rose</b> Scaled Score = 5 Poor visual-perceptual and spatial reasoning abilities.	<b>Mark</b> Scaled Score = 5 Poor visuomotor skills.
--	--

Process-Oriented Approach to Interpretation

ALWAYS LEARNING PEARSON

---

---

---

---

---

---

---

---

**Digit Span**

<b>Sue</b> Scaled Score = 6 Below average storage capacity.	<b>Sam</b> Scaled Score = 6 Below average mental manipulation.
---	--

Process-Oriented Approach to Interpretation

ALWAYS LEARNING PEARSON

---

---

---

---

---


---

---

---

# Introducing the WISC-V Integrated

## Gloria Maccow, Ph.D., Assessment Training Consultant



**Aaron**

Scaled Score = 5

Slow processing speed.

**Jason**

Scaled Score = 5

Slow graphomotor speed.

**Coding**

**Process-Oriented Approach to Interpretation**

ALWAYS LEARNING

PEARSON

---

---

---

---

---

---

---

---



### WISC-V and WISC-V Integrated

ALWAYS LEARNING

PEARSON

---

---

---

---

---

---

---

---

Domain	Subtests	Index Score
Verbal Comprehension	WISC-V: Similarities, Vocabulary	Multiple Choice Verbal Comprehension Index
	WISC-V Integrated: Similarities Multiple Choice, Vocabulary Multiple Choice	
	Picture Vocabulary Multiple Choice	
	Information Multiple Choice, Comprehension Multiple Choice	
Visual Spatial	Block Design	Block Design Multiple Choice
Fluid Reasoning	Figure Weights, Arithmetic	Figure Weights Process Approach, Arithmetic Process Approach, Written Arithmetic
	Picture Span, Digit Span	
	Spatial Span, Sentence Recall	
Working Memory	Picture Span, Digit Span	Visual Working Memory Index
Processing Speed	Coding, Cancellation	Coding Recall, Coding Copy, Cancellation Abstract

**WISC-V and WISC-V Integrated**

ALWAYS LEARNING

PEARSON

---

---

---

---

---

---

---

---

# Introducing the WISC-V Integrated

Gloria Maccow, Ph.D., Assessment Training Consultant

## Process Subtests

14 Optional Process Subtests

- 8 Adaptations
- 2 Variations
- 4 Expansions/Extensions

ALWAYS LEARNING PEARSON

---

---

---

---

---

---

---

---

## Adaptations

Same item content as corresponding primary or secondary WISC-V subtest, and modifications to mode of presentation, response format, or item administration.

- Similarities MC
- Vocabulary MC
- Picture Vocabulary MC
- Comprehension MC
- Information MC
- Figure Weights Process Approach
- Arithmetic Process Approach
- Written Arithmetic

ALWAYS LEARNING PEARSON

---

---

---

---

---

---

---

---

## Variations

Novel item content and modifications to mode of presentation, response format, or item administration.

- Block Design MC
- Cancellation Abstract

ALWAYS LEARNING PEARSON

---

---

---

---

---

---

---

---

# Introducing the WISC-V Integrated

Gloria Maccow, Ph.D., Assessment Training Consultant

## Expansions/Extensions

Expand scope of construct coverage and provide information related to child's performance on other subtests

- Coding Copy
- Coding Recall
- Sentence Recall
- Spatial Span

ALWAYS LEARNING PEARSON

---

---

---

---

---

---

---

---

## Process Subtest Selection

- Don't use all processing subtests/procedures with every child
- Select based upon:
  - Referral questions
  - Observations made during core assessment
  - Need to collect confirmatory data

ALWAYS LEARNING PEARSON

---

---

---


---

---

---

---

---



## Description of Process Subtests

ALWAYS LEARNING PEARSON

---

---

---

---

---


---

---

---



Introducing the WISC-V Integrated  
Gloria Maccow, Ph.D., Assessment Training Consultant



Verbal Multiple Choice Process Subtests

ALWAYS LEARNING PEARSON

---

---

---


---

---

---

---

---

**Verbal Multiple Choice Process Subtests** 

- Similarities Multiple Choice (Similarities MC)
- Vocabulary Multiple Choice (Vocabulary MC)
- Picture Vocabulary Multiple Choice (Picture Vocabulary MC)
- Information Multiple Choice (Information MC)
- Comprehension Multiple Choice (Comprehension MC)

ALWAYS LEARNING PEARSON

---

---

---


---

---

---

---

---

**Verbal Multiple Choice Process Subtests** 

- Each subtest uses frequently given correct and incorrect responses from the related WISC-V version.
- All but Picture Vocabulary MC and Information MC scored on a 2, 1, 0 basis as on WISC-V subtests.
- Rationale: Integrated subtests remove the need for using expressive language or recalling information from long-term storage.

ALWAYS LEARNING PEARSON

---

---

---

---


---

---


---

---

Introducing the WISC-V Integrated  
Gloria Maccow, Ph.D., Assessment Training Consultant

**Similarities Multiple Choice (SIMC)** 

- SIMC is a multiple-choice **adaptation** of the WISC-V Similarities subtest.
- Each item and its response options are presented visually and read aloud.
- The child selects the response option that best represents how the common objects or concepts are similar.

ALWAYS LEARNING 

---

---

---


---

---


---

---

---

**Vocabulary Multiple Choice (VCMC)** 

- VCMC is a multiple-choice **adaptation** of the WISC-V Vocabulary subtest.
- For each picture item, the child views a picture and selects the best response from options read aloud.
- For verbal items, each item and its response options are presented visually and read aloud.
- The child selects the response option that best represents the definition of the word.

ALWAYS LEARNING 

---

---

---


---

---


---

---

---

**Picture Vocabulary Multiple Choice (PVMC)** 

- PVMC is a pictorial multiple-choice **adaptation** of the WISC-V Vocabulary subtest.
- The child views four pictures and selects the picture that best depicts the definition of the word that is presented verbally.

ALWAYS LEARNING 

---

---

---

---

---

---

---

---

Introducing the WISC-V Integrated  
Gloria Maccow, Ph.D., Assessment Training Consultant

**Information Multiple Choice  
(INMC)**



- INMC is a multiple-choice **adaptation** of the WISC-V Information subtest.
- Each item and its response options are presented visually and read aloud.
- The child selects the response option that best represents an understanding of the general knowledge topic.

ALWAYS LEARNING

PEARSON

---

---

---

---

---

---

---

---

**Comprehension Multiple Choice  
(COMC)**



- COMC is a multiple-choice **adaptation** of the WISC-V Comprehension subtest.
- Each item and its response options are presented visually and read aloud.
- The child selects the response option that best represents an understanding of the general principle or social situation.

ALWAYS LEARNING

PEARSON

---

---

---

---

---

---

---

---



Visual Spatial Process Subtests

ALWAYS LEARNING

PEARSON

---

---

---

---


---

---


---

---

Introducing the WISC-V Integrated  
Gloria Maccow, Ph.D., Assessment Training Consultant

**Block Design Multiple Choice (BDMC)** 

- BDMC is a multiple-choice **variation** of the WISC-V Block Design subtest.
- The child views a picture of a constructed block design and selects the pictured block set that produces a matching composition, within a specified time limit.
- Assesses visual integration and mental construction skills without the influence of motor planning and execution.

ALWAYS LEARNING 

---

---

---


---

---


---

---

---



Fluid Reasoning Process Subtests

ALWAYS LEARNING 

---

---

---


---

---


---

---

---

**Figure Weights Process Approach (FWP)** 

- FWP is an **adaptation** of the WISC-V Figure Weights subtest in which the child is given additional time to respond.
- Within an extended time limit, the child is readministered Figure Weights items previously scored 0 points.

ALWAYS LEARNING 

---

---

---

---

---

---

---

---

# Introducing the WISC-V Integrated Gloria Maccow, Ph.D., Assessment Training Consultant

## Arithmetic Process Approach (ARP)



- ARP is an **adaptation** of the WISC-V Arithmetic subtest. Specific Items 6–34 are presented in multiple modalities for the child to solve within a specified time limit.
- For Part A, Arithmetic items on which the child scored 0 points are presented visually and simultaneously read aloud.
- For Part B, the child is provided paper and pencil, and is readministered the items scored 0 points in Part A.

ALWAYS LEARNING

PEARSON

---

---

---

---

---

---

---

---

## Written Arithmetic (WA)



- WA is an **adaptation** of the WISC-V Arithmetic subtest.
- The child is presented with the mathematical computations for Arithmetic items and uses a pencil to complete them.

ALWAYS LEARNING

PEARSON

---

---

---

---

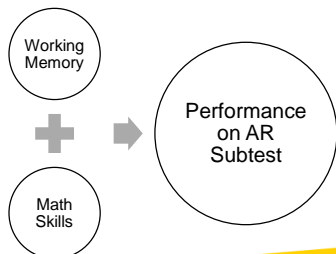
---

---

---

---

## Arithmetic Process Approach and Written Arithmetic



ALWAYS LEARNING

PEARSON

---

---

---

---

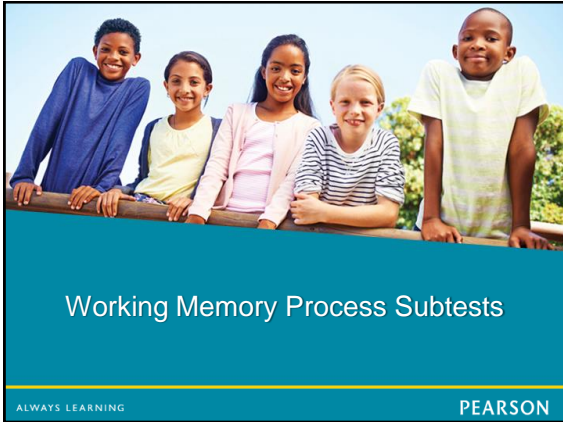
---

---

---

---

Introducing the WISC-V Integrated  
Gloria Maccow, Ph.D., Assessment Training Consultant



---

---

---

---


---

---


---

---

### Spatial Span (SSP)



- SSP is a **variation** of the WISC–V Digit Span subtest. DS uses numbers; SSP uses letters.
- For Spatial Span Forward, the child reproduces a sequence of tapped blocks.
- For Spatial Span Backward, the child reproduces in reverse order a sequence of tapped blocks.



ALWAYS LEARNING **PEARSON**

---

---

---

---


---

---

---

---

### Spatial Span (SSP)



- SSP provides an assessment of spatial working memory.
- SSP score can be contrasted with various verbal working memory measures.
- Letters/words/pseudowords are easier to remember and administer/score.

ALWAYS LEARNING **PEARSON**

---

---

---

---

---

---

---

---

# Introducing the WISC-V Integrated Gloria Maccow, Ph.D., Assessment Training Consultant

## Sentence Recall (SR)



- SR items are composed of two tasks: a question task and a recall task.
- For the question task, the child responds either “Yes” or “No” to one or more simple questions.
- For the recall task, the child recalls the last word of each question, in the order presented.

ALWAYS LEARNING

PEARSON

---

---

---

---

---

---

---

---



## Processing Speed Process Subtests

ALWAYS LEARNING

PEARSON

---

---

---

---

---

---

---

---

## Coding Recall (CDR)



- CDR **expands** the scope of the WISC-V Coding subtest.
- Working within a specified time limit and without a key, the child attempts to remember the corresponding pairs from Coding in three formats: cued recall, free recall, and pairing.
- After completing Coding, examinee recalls
  - symbols associated with each number of shape: cued (Form A and Form B);
  - symbols via free recall;
  - numbers associated with each symbol: pairing (Form B only).

ALWAYS LEARNING

PEARSON

---

---

---

---

---

---


---

---

# Introducing the WISC-V Integrated

Gloria Maccow, Ph.D., Assessment Training Consultant

### Coding Copy (CDC)



- CDC **expands** the scope of the WISC-V Coding subtest. Within a specified time limit, the child copies the symbols used in Coding.
- Allows examiner to assess impact of graphomotor speed on performance on Coding.
  - Low scores on Coding Copy: Possibly poor graphomotor speed interfering with Coding performance.
  - High scores on Coding Copy: Possibly poor incidental learning and visual scanning interfering with Coding performance.

ALWAYS LEARNING PEARSON

---

---

---

---


---

---

---

---

### Cancellation Abstract (CAA)



- CAA is a **variation** of the WISC-V Cancellation subtest.
- Working within a specified time limit, the child scans two arrangements of shapes (one random, one structured) and marks target shapes.

ALWAYS LEARNING PEARSON

---

---

---

---

---

---

---

---



### Scores

ALWAYS LEARNING PEARSON

---

---

---

---

---

---

---


---



# Introducing the WISC-V Integrated

Gloria Maccow, Ph.D., Assessment Training Consultant

## Subtest Scores



- Scores on the 14 WISC-V Integrated process subtests are reported as scaled scores (mean = 10; standard deviation = 3).
- The scaled scores for the process subtests are for comparison purposes only.

Scaled scores for process subtests are not used in the calculation of WISC-V Primary Index Scores and Full Scale IQ.

ALWAYS LEARNING PEARSON

---

---

---

---


---

---

---

---

## Composite Scores



**MCVCI**  
(Multiple Choice Verbal Comprehension Index)

- SIMC + VCMC
- Provides an estimate of verbal comprehension
- Helpful for examinees with expressive language difficulties

**VWMI**  
(Visual Working Memory Index)

- Picture Span + Spatial Span
- Compare with WISC-V AWMI
- Working memory domain specific at this age-range

ALWAYS LEARNING PEARSON

---

---

---

---


---

---

---

---

## Other Scores



- Parts, where it makes sense
  - e.g., Spatial Span Forward, Spatial Span Backward, and comparison
  - e.g., Arithmetic Process Approach Part A and Part B, and comparison
- Longest span scores

ALWAYS LEARNING PEARSON

---

---

---

---

---

---


---

---

# Introducing the WISC-V Integrated

Gloria Maccow, Ph.D., Assessment Training Consultant

## Process Observations



- The same process observations as are available on WISC-V in Appendix D of the Technical and Interpretive Manual.
- Base rates for behaviors.

ALWAYS LEARNING PEARSON

---

---

---

---


---

---

---

---

## Comparison Scores



Discrepancy comparisons with WISC-V

- Compare process scores and subtests
- Compare composite scores where it makes sense (e.g., VCI vs. MCVCI)

ALWAYS LEARNING PEARSON

---

---

---

---

---

---

---

---



## Clinical Utility of WISC-V Integrated

ALWAYS LEARNING PEARSON

---

---

---

---

---

---

---

---

# Introducing the WISC-V Integrated

## Gloria Maccow, Ph.D., Assessment Training Consultant

### Male, Grade 5, Age 10:5

WISC-V Index/Subtest	Composite Score/ Scaled Score	WISC-V Index/Subtest	Composite Score/ Scaled Score
Verbal Comprehension	76	Working Memory	88
Similarities	6	Digit Span	6
Vocabulary	5	Picture Span	10
(Information)	(7)	(Letter-Number Sequencing)	(5)
(Comprehension)	(6)	Processing Speed	86
Visual Spatial	86	Coding	5
Block Design	5	Symbol Search	10
Visual Puzzles	10	(Cancellation)	(9)
Fluid Reasoning	103		
Matrix Reasoning	11		
Figure Weights	10		
(Picture Concepts)	(9)		
(Arithmetic)	(13)		
<b>Full Scale IQ 77</b>			

ALWAYS LEARNING PEARSON

---

---

---

---

---

---

---

---

---

---

---

---

### Addition of WISC-V Integrated

WISC-V Subtest	WISC-V Integrated Subtest	Scaled Score	
Similarities	Similarities Multiple Choice	6	12
Comprehension	Comprehension Multiple Choice	6	15
	Vocabulary Multiple Choice		10
Vocabulary	Picture Vocabulary Multiple Choice	5	10
	Information Multiple Choice	7	7
Block Design	Block Design Multiple Choice	5	10
Digit Span	Spatial Span	6	10
Coding	Coding Copy	5	5
	Coding Recall		10

(WISC-V Integrated, 2015)

ALWAYS LEARNING PEARSON

---

---

---

---

---

---

---

---

---

---

---

---

### WISC-V Integrated Kit

- Administration and Scoring Manual
- Technical and Interpretive Manual
- Record Form
- Stimulus Books 1 and 2
- Response Booklets 1 and 2
- Coding Recall Scoring Key
- Cancellation Abstract Scoring Template
- Spatial Span Board
- #2 Pencil without eraser

Coming Fall 2015!

Materials and Pricing			
Pre-publication pricing is available until August 31, 2015!			
Kit Code	Description	Price	Pre-Pub Price
0158008413	WISC-V Integrated Kit	\$305.00	\$274.50

ALWAYS LEARNING PEARSON

---

---

---

---

---

---

---

---

---

---

---

---

Introducing the WISC-V Integrated  
Gloria Maccow, Ph.D., Assessment Training Consultant



Customer Support  
1-866-627-7271 (USA)  
1-866-335-8418 (Canada)  
[www.psychcorp.com](http://www.psychcorp.com)  
[www.pearsonassess.ca](http://www.pearsonassess.ca)

ALWAYS LEARNING PEARSON

---

---

---

---

---

---

---

---



THE POWER OF WISC-V JUST GOT **STRONGER**

ALWAYS LEARNING PEARSON

---

---

---

---

---

---

---

---