Woodcock-Muñoz 101: Administration, Scoring and Interpretation

Minsong Kim & Caroline Vuilleumier
Roche Center for Catholic Education
Lynch School of Education
Boston College

June 23, 2015
Agenda

● Overview of the Woodcock-Muñoz Assessment
● Explanation of testing materials
● Mock-run of test administration and scoring
● Demonstration of data display and utility
● Introduction to CD-ROM scoring software
Goals

- To understand the importance and utility of summative language assessment data
- To become familiar with the WM testing materials, procedures, and score reporting
- To increase awareness of essential data elements that will ensure validity of scores
What is Woodcock-Muñoz?

- A norm-referenced measure of reading, writing, listening and comprehension
- Appropriate for students 2+ years of age
- Spanish and English forms
- We test 4 of the 7 sections in each language
  - Vocabulario sobre dibujos / Picture vocabulary
  - Analogías verbales / Verbal analogies
  - Ident de letras y palabras / Letter-word identification
  - Comprensión de textos / Passage comprehension
- Depending on proficiency of the child, testing in both languages can take anywhere from 10-30 minutes
Woodcock-Muñoz Sections

Section 1: Picture Vocabulary
- Measures aspects of oral language, including language development and lexical knowledge

Section 2: Verbal Analogies
- Measures the ability to reason using lexical knowledge

Section 3: Letter-Word Identification
- Measures letter and word identification skills

Section 7: Passage Comprehension
- Measures students’ understanding of written discourse as it is being read to them
Woodcock-Muñoz Data Collection

- Our veteran Network schools have been collecting this summative data at 2 time points throughout the school year (Fall and Spring administrations)
- To document each student’s language development from year to year, we ask the following...
  - **September 2015**: Test all TWI students to establish a baseline for each child
  - **June 2016**: Test all TWI students
  - **September 2016**: Test ONLY those students who are new to the TWI program
  - **June 2017**: Test all TWI students
  - **September 2017**: Test ONLY those students who are new to the TWI program
  - **June 2018**: Test all TWI students
Woodcock-Muñoz Testing Kit

Materials include:
● Spanish Form Test Book (7 sections)
● English Form A Test Book (7 sections)
● Spanish Form Test Records (25 count)
● English Form A Test Records (25 count)
● Comprehensive Manual
● Audio Recording CD (needed for Sections 5 and 6 only)
Test Book and Easel

Student view

- Red truck
- Piggy bank
- Spider web
- Toaster
- Coat hanger
- Microphone

Examiner view

18. Point to picture on subject's page and say: What is this?
   ▲ Correct: truck
   ▲ Query: car—Tell me another answer.

19. Point to picture and say: What is this called?
   ▲ Correct: spider web, web
   ▲ Query: spider—Tell me another word.

20. Point to picture and say: What is this called?
    ▲ Correct: hanger, clothes hanger

21. Point to picture and say: What is this?
    ▲ Correct: piggy bank, bank
    ▲ Query: pig, piggy—Tell me more.

22. Point to picture and say: What is this?
    ▲ Correct: toaster

23. Point to picture and say: What is this called?
    ▲ Correct: microphone
Ideal Seating Arrangement

Examiner and student sit diagonally across from each other at the corner of a table
• e.g., Right-handed examiner and student
Arranging the Setting

Examiner should be able to:

- Simultaneously view the student’s side of easel and the examiner’s side
- Record responses out of the student’s view using the testing easel as a screen

e.g., Left-handed examiner and student
Score Sheet

Exhibit 1: Woodcock-Munoz Score Sheet

Please collect the following essential information about the students for Woodcock-Munoz Testing

Identifying Information
1. Last and first names
2. Sex
3. Date of Birth
4. School
5. Teacher’s full name
6. Date of test administered
7. Grade
8. Test examiner’s full name

Language Use Questionnaire
- Please collect information for questions 1, 2, and 3
- If you don’t have the % usage information, just write in the student’s primary language

- In each FALL semester, only administer the Woodcock-Munoz to new students to your TWI program
- In each SPRING semester, administer the Woodcock-Munoz to all students enrolled in the TWI program
Mock Test Administration

Please be sure to provide a full first and last name for each student to make it easier for us to identify children from year to year. We are assigning an ID to each child in our database to link their scores longitudinally.

If you do not provide a birth date **and** a date of testing, the scoring software cannot generate a score report since the norms are based on age at testing, **not** grade level. These dates are critical!

Home language information is important for analysis so that we can look at subgroups of students based on their language use outside of school.
Section 1

Every item for which a child provides a response should be scored with a 0 or a 1.

Ignore the basals when testing.

The ceiling is critical and is different for each section. Please pay attention to the ceiling when scoring!

No need to follow this suggestion. We would like each child to start with the sample items.
Section 1

We begin with the sample items, reading the examiner script printed in blue.

---

**Sample Items**

**A.**

Say: *This is a picture of a baby. I am going to put my finger on the baby.*

Point to picture of baby on subject's page.

Now you put your finger on the baby.

▲ Correct: points to picture of baby

◆ A: No Response

Encourage subject to point by demonstrating and repeating instructions as necessary.

---

**B.**

Here is a picture of a car (point), and a picture of a dog (point). Put your finger on the car.

▲ indicates correct response

▲ Correct: points to car

◆ B: No Response

Point to car and say: *This is the car. Now put your finger on the car.* If necessary, encourage subject by demonstrating and repeating instructions.
Section 1

Now the test items start and we score...

Test Items

1. Point to picture on subject's page and say: **What is this?**
   ▲ **Correct:** ball, any specific type of ball

踏实了:** No Response**
Encourage response by repeating instructions as necessary.
Section 1

Examiners should not indicate in any way whether the child’s response is right or wrong. It helps to provide a standard response after every answer a child gives regardless of correctness (e.g., “good”).

2. Point to picture on subject’s page and say: **Put your finger on the boy’s mouth.**
   ▲ **Correct:** points to mouth
   ✤ 2–3: No Response
   Encourage response by repeating instructions as necessary.

3. Point to picture and say: **Put your finger on the window.**
   ▲ **Correct:** points to window
Section 1

4. Point to picture on subject's page and say: **What are these?**
   - **Correct:** balloons
   - **4–6: No Response**
     Encourage response by repeating instructions as necessary.

5. Point to picture and say: **What is this?**
   - **Correct:** cat

6. Point to picture and say: **What is this called?**
   - **Correct:** chair
Section 1

If a child gives an interesting response and you are not sure whether to code it as a 0 or 1, make a note in the margins.

Point to picture on subject's page and say: **What is this called?**

▲ **Correct:** house, home

**7–11: No Response**
Encourage response by repeating instructions as necessary.

Point to picture and say: **What is this?**

▲ **Correct:** apple

Point to picture and say: **What is this?**

▲ **Correct:** sock

Point to picture and say: **What are these?**

▲ **Correct:** glasses, reading glasses, eye glasses, spectacles

Point to picture and say: **What is this?**

▲ **Correct:** boat, sailboat
Section 1

Probe further if needed (as in the Query examples.) Use your discretion to decide whether a response warrants a 0 or a 1.

12. Point to picture on subject's page and say: **What is this?**
   ▲ **Correct:** ice cream cone, ice cream

13. Point to picture and say: **What is this?**
   ▲ **Correct:** cow
   Q **Query:** moo—**Tell me another word.**

14. Point to picture and say: **What is this?**
   ▲ **Correct:** toothbrush

15. Point to picture and say: **What is this called?**
   ▲ **Correct:** drum

16. Point to picture and say: **What is this?**
   ▲ **Correct:** flashlight
   Q **Query:** light—**Tell me another answer.**

17. Point to picture and say: **What is this?**
   ▲ **Correct:** rocking chair
   Q **Query:** chair—**What kind of chair?**
Section 1

We are waiting for the child to give six wrong responses in a row to hit the ceiling and end this section of the test.
Section 1

Number 29 (notebook) marks the fourth incorrect response in a row.
Section 1

Number 31 (jellyfish) marks the sixth incorrect response in a row. However, you have to finish the entire page before you end the test.
Section 1

Note that we filled in 0’s for the items beyond #31 (the ceiling) because the child attempted these items. Please do this!

When you tally the final number correct, do not include the sample items. Simply count up all the 1’s you recorded.
Section 2

Test 2  Verbal Analogies

Administration Overview
- Items may be repeated if requested by subject.

Scoring
- 1 = Correct response
- 0 = Incorrect response
- Do not penalize a subject for mispronunciations resulting from articulation errors, dialect variations, or regional speech patterns.
- Score a response correct if it differs from the correct response(s) listed only in verb tense or number (singular/plural), unless otherwise indicated by the scoring key.
- Score a response incorrect if the subject substitutes a different part of speech, such as a noun for a verb, unless otherwise indicated by the scoring key.
- Record the number correct in the software scoring program.
- When calculating the number correct, count all items below the basal as correct.

Starting Point
- All subjects begin with Sample Item A.
Section 2

As we did before, ignore the basals and suggested starting points when testing. Begin with sample items.

The ceiling for this section is 6 incorrect responses. You do not need to finish the page for this section since the student view is completely blank for test items.
Section 2

Verbal analogies tend to be very difficult, especially for young children since the concept is so abstract. You will likely have to encourage a response.

1. Make eye contact with the subject and say: A pig goes oink-oink and a cat goes... (pause).
   ▲ Correct: meow

2. A hairbrush is for hair and a toothbrush is for... (pause).
   ▲ Correct: teeth, tooth

3. A horse is big and a mouse is... (pause).
   ▲ Correct: small, little
Section 2

For #6, an interesting response was given so it was noted in the margins but the examiner did not deem this response to be correct.

If the child code switches in their response (e.g., they respond with the correct word but in Spanish on the English assessment), please score this with a 0 but note the response in the margin!
For #12, an interesting response was given so it was noted in the margins and the examiner felt this was a valid response in spite of it not being listed as a potential correct answer. This is OK!
Numbers 16-19 are all incorrect. We are waiting for 6 incorrect responses in a row to end this section of the test.
Section 2

Numbers 21 marks the sixth incorrect response in a row. We can end the test here - this is the only section where we don’t finish out the page.

Tally up the number of recorded 1’s at the end of the section. Do not count the sample items.
As we did before, ignore the basals and suggested starting points when testing. Begin with sample items.

The ceiling for this section is 6 incorrect responses and you must finish the page of items before ending this section.

Sample items do not count in the final tally.
Section 7

As we did before, ignore the basals and suggested starting points when testing. Begin with sample items.

The ceiling for this section is 5 incorrect responses and you must finish the page of items before ending this section.

Sample items do not count in the final tally.
Data Management in Excel

Two options to share data with TWIN-CS Design Team

Option 1:
• Input raw scores into an Excel file like the one shown below
• We can share this template with you, while also providing identifying info and language info.
Generating WM Scores

Option Two:
• Generate WM score reports from the raw scores using the CD-ROM Scoring Software.

System requirements:
• WM scoring software cannot be installed on a Mac. It will only install on a PC.
• To generate a score report for each child, you need either Microsoft Word or Adobe Reader installed on your PC.
Score Reports

We are interested in 3 metrics printed in the score report for each student:

● The W score (W) - a growth measure
● The percentile rank (PR)
● The standardized score (SS)

These are calculated separately for each language and are based on age norms. The report also includes a written description of the child’s proficiency in layman terms.
Score Reports

Woodcock-Muñoz Language Survey--Revised, Normative Update
Report of Language Proficiency Testing
English and Spanish

Name: Vuilleumier, Caroline
Date of Birth: 04/12/1985
Age: 30 years, 2 months
Sex: F
Dates of Testing:
06/09/2015 (English)
06/09/2015 (Spanish)

School: Our Lady of Fatima
Teacher: Sullivan
Grade: K.9
Examiners:
Kim
Kim

TESTS ADMINISTERED

Caroline was administered a set of tests from the Woodcock-Muñoz Language Survey--Revised, Normative Update (WMLS-R NU) English Form A and Spanish Form.

ENGLISH LANGUAGE PROFICIENCY TESTING

Woodcock-Muñoz Language Survey--Revised, Normative Update, English Form A
Norms based on age 30

TABLE OF SCORES

<table>
<thead>
<tr>
<th>Test/CLUSTER</th>
<th>W</th>
<th>AE</th>
<th>CALP Level</th>
<th>RPI</th>
<th>PR</th>
<th>SS 68% Band</th>
<th>CALP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Picture Vocabulary</td>
<td>456</td>
<td>5-11</td>
<td>-</td>
<td>0/90</td>
<td>1</td>
<td>64 (61-66)</td>
<td>-</td>
</tr>
<tr>
<td>Verbal Analogies</td>
<td>472</td>
<td>5-8</td>
<td>-</td>
<td>5/90</td>
<td>5</td>
<td>75 (72-78)</td>
<td>-</td>
</tr>
<tr>
<td>Letter-Word Identification</td>
<td>416</td>
<td>6-10</td>
<td>-</td>
<td>0/90</td>
<td>&lt;0.1</td>
<td>52 (50-54)</td>
<td>-</td>
</tr>
<tr>
<td>Passage Comprehension</td>
<td>442</td>
<td>5-5</td>
<td>negligible</td>
<td>0/90</td>
<td>0.3</td>
<td>55 (55-56)</td>
<td>-</td>
</tr>
<tr>
<td>ORAL LANGUAGE</td>
<td>464</td>
<td>5-5</td>
<td>negligible</td>
<td>0/90</td>
<td>0.1</td>
<td>55 (53-58)</td>
<td>1</td>
</tr>
<tr>
<td>READING</td>
<td>429</td>
<td>6-8</td>
<td>negligible</td>
<td>0/90</td>
<td>0.2</td>
<td>57 (56-59)</td>
<td>1</td>
</tr>
</tbody>
</table>
Score Reports

Scores from these reports can be stored and sent to the Design Team in an Excel file like the one shown below.

<table>
<thead>
<tr>
<th>Test/CLUSTER</th>
<th>W</th>
<th>AE</th>
<th>CALP Level</th>
<th>RPI</th>
<th>PR</th>
<th>SS (8% Band)</th>
<th>CALP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocabulario sobre dibujos</td>
<td>398</td>
<td>&lt;2-0</td>
<td></td>
<td>0/90</td>
<td>&lt;0.1</td>
<td>36 (33-39)</td>
<td>-</td>
</tr>
<tr>
<td>Analogías verbales</td>
<td>441</td>
<td>&lt;4-0</td>
<td></td>
<td>0/90</td>
<td>0.3</td>
<td>58 (55-62)</td>
<td>-</td>
</tr>
<tr>
<td>Identi de letras y palabras</td>
<td>367</td>
<td>5-9</td>
<td></td>
<td>0/90</td>
<td>&lt;0.1</td>
<td>36 (34-38)</td>
<td>-</td>
</tr>
<tr>
<td>Comprensión de textos</td>
<td>353</td>
<td>&lt;2-0</td>
<td></td>
<td>0/90</td>
<td>&lt;0.1</td>
<td>15 (6-24)</td>
<td>-</td>
</tr>
<tr>
<td>LENGUAJE ORAL</td>
<td>415</td>
<td>&lt;2-0</td>
<td>negligible</td>
<td>0/90</td>
<td>&lt;0.1</td>
<td>23 (19-26)</td>
<td>1</td>
</tr>
<tr>
<td>LECTURA</td>
<td>360</td>
<td>4-2</td>
<td>negligible</td>
<td>0/90</td>
<td>&lt;0.1</td>
<td>32 (28-35)</td>
<td>1</td>
</tr>
</tbody>
</table>
Common Pitfalls of the WM

- Testing students in English and Spanish with large lag times in between (more than 2 weeks)
- Not applying the ceiling rule correctly and not finishing the page of items when required
- Missing DOB and/or Date of Testing on scoring form (raw scores cannot be entered into software)
- Ambiguous scoring of 0’s and 1’s (difficult to read or 0 and 1 written on the same line for an item)
- Incorrect tally of 1’s on the scoring form
- Not providing primary language information
Network-wide Picture Vocab Growth by L1

- Eng Picture Vocab (L1=Eng)
- Spa Picture Vocab (L1=Eng)
- Eng Picture Vocab (L1=Spa)
- Spa Picture Vocab (L1=Spa)
Communicating with Data (2)

Network-wide Verbal Analogies Growth by L1

- Eng Verbal Analogy (L1=Eng)
- Spa Verbal Analogy (L1=Eng)
- Eng Verbal Analogy (L1=Spa)
- Spa Verbal Analogy (L1=Spa)
Network-wide Letter-Word ID Growth by L1

- Eng Letter-Word ID (L1=Eng)
- Spa Letter-Word ID (L1=Eng)
- Eng Letter-Word ID (L1=Spa)
- Spa Letter-Word ID (L1=Spa)
Network-wide Passage Comp Growth by L1

Communicating with Data (4)
Communicating with Data (5)

School 13 Standard Scores
Kindergarten - 4th grade, Spring 2015

Kindergarten
1st grade
2nd grade
3rd grade
4th grade

Value
Communicating with Data (6)

School 17 Picture Vocab Growth: Fall 2014 Kinder to Spring 2015 Kinder

School 17 Verbal Analogies Growth: Fall 2014 Kinder to Spring 2015 Kinder

School 17 Letter-Word ID Growth: Fall 2014 Kinder to Spring 2015 Kinder

School 17 Passage Comprehension Growth: Fall 2014 Kinder to Spring 2015 Kinder
Communicating with Data (7)

School 13 Picture Vocab Growth: 2013 K to 2015 First

School 13 Verbal Analogies Growth: 2013 K to 2015 First
Communicating with Data (8)

School 13 Letter-Word ID Growth: 2013 K to 2015 First

School 13 Passage Comprehension Growth: 2013 K to 2015 First
Using the Scoring Software (1)
Using the Scoring Software (2)
Using the Scoring Software (3)

Click “New” to add a student to the database.
Enter Last Name, First Name, Sex, and DOB. If you would like to assign an ID or a Group ID for your own database management, you are welcome to do so. Click “Save” when you are done entering information. Note that you must enter a DOB to save this record.
Using the Scoring Software (5)

Click “Add Record” on this screen and select the appropriate test form (either English Form A or Spanish Form).
You must enter a date of testing and a grade, otherwise you will not be able to save the record.

The software will autofill the student’s age at testing. When you enter the grade level, the second field after the decimal will autofill with the month (e.g., K.9 indicates kindergarten in the 9th month of the school year).

Click the floppy disk icon to save when you are done. Then hit the green back arrow button to return to the previous screen.
Your previously entered record for English Form A will now be visible in the list of records for this student. As this child takes this test year after year, the list of records will grow.

Click “Add Record” again and select the Spanish Form.
Unfortunately, the lowest grade level you can enter is K. If you are testing a PreK child, simply enter K into this field. Remember, we are norming on age so the grade level, while required, is not critical.

Click the floppy disk icon to save when you are done. Then hit the green back arrow button to return to the previous screen.
When you are ready to generate W, PR, and SS scores and proficiency descriptions, click “Reports” and select the first option in the menu - “Standard Reports”.
Using the Scoring Software (10)

Make sure the test dates you just entered have a check mark next to them. Then click “Next”.

Select test records to include in report.
Using the Scoring Software (11)

Make sure that “RPI” and “Age” are selected (these are the defaults). Then click “Next”.
Using the Scoring Software (11)

Click “Send to Word Processor” to generate a report in Microsoft Word.
Using the Scoring Software (12)

[Document Content]