Disclosures

- Dr. Scheller is an employee of Pearson (financial), publisher of the PLS-5 and CELF P:2. No other language assessments will be presented in this presentation.
Overview

1. Purpose and design of the PLS-5 and CELF Preschool-2
2. PLS-5 and CELF Preschool-2 test format and impact on child performance
3. PLS-5 and CELF Preschool normative data and scoring
4. Case study
5. Q and A

Learning Outcomes

- At the completion of the webinar, participants will be able to:
  - Describe two differences between PLS-5 and CELF Preschool-2 test purpose and design
  - Explain how the test formats can result in different scores.
  - List two reasons why differences in research data can result in different scores.
  - Describe why you might choose one test over the other depending on the profile of the child you test.
PLS-5 vs. CELF Preschool-2: Matching the Assessment to a Communication Profile
Adam Scheller, Ph.D.

PLS-5 can be used to. . .

- Ages birth to 7:11
- Determine presence of a language delay/disorder.
  - Determine whether child has receptive or expressive language delay/disorder, or combination of both
- Determine eligibility for early intervention or speech/language services.
PLS-5 can be used to. . .

- Identify both receptive and expressive language skills in the areas of:
  - Attention, gesture, play, vocal development, social communication, vocabulary, concepts, language structure, integrative language, and emergent literacy.
- Identify a child’s language strengths and weaknesses to develop appropriate interventions.

Progress Monitoring

Track Progress
- Measure efficacy of S/L treatment and interventions
- Use GSV to track progress of child’s skills on the same instrument
  - Can be given at each time child transitions to new developmental period
Item Criteria for PLS-5 is Developmentally Sensitive

• Birth – 11 months old
  • Items represent behaviors that are precursors to language
  • Caregiver involvement to maximize performance and caregiver reporting to ensure credit for skills.
• 1 – 2 years old
  • Use of manipulatives and play for more authentic assessment
  • Scoring of spontaneous interactions
• 3 – 4 years old
  • Engagement in interactive behaviors
  • Practice items level field for children w/o school or testing experience
• 5 – 7 years old
  • Integration of knowledge and language skills holistically
  • Evaluation of emergent literacy and academic skills

1 month norms for 2:6 – 2:11

• Children transitioning from EI to school services often referred for testing at age 2:11.
  • 6 month norm interval potentially inflated scores
  • With 1 month interval, child is being compared to his/her 1 month age group rather than 6 month age group

• Score will (likely) differ if you derive Standard Scores using 6-month or 1-month interval
  • Best Practice: use same interval consistently for all children in this age range.
  • Specify if that you are using 1-month norm intervals.
Sample mirrors March 2008 Update of the U.S. Census: Race/Ethnicity

- African-American: 14%
- Asian: 4%
- Hispanic: 23%
- White: 55%
- Other: 4%

Sample mirrors March 2008 Update of the U.S. Census: Parent Education

- 1-5 years: 15%
- High School diploma or GED: 20%
- 1-3 years college or technical school: 28%
- 4 or more years of college: 31%
Sample mirrors March 2008 Update of the U.S. Census: Region

Where Children in the PLS-5 Sample Spend the Majority of their Day
Are children with disabilities included in the PLS-5 sample?

<table>
<thead>
<tr>
<th>Educational Classification/ Diagnosis</th>
<th>PLS-5 Sample</th>
<th>U.S. Pop.*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Attention-Deficit/Hyperactivity Disorder</td>
<td>3</td>
<td>0.2</td>
</tr>
<tr>
<td>Developmental Delay</td>
<td>16</td>
<td>1.1</td>
</tr>
<tr>
<td>Gifted/Talented</td>
<td>5</td>
<td>0.4</td>
</tr>
<tr>
<td>Intellectual Disability</td>
<td>2</td>
<td>0.1</td>
</tr>
<tr>
<td>Orthopedic/Motor Impairment</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>Other</td>
<td>13</td>
<td>0.9</td>
</tr>
<tr>
<td>Speech-Language Disorder</td>
<td>55</td>
<td>3.9</td>
</tr>
</tbody>
</table>


†U.S. population data available for combined ages 6–16 only. The PLS-5 normative sample data could not be accurately compared to the U.S. population data due to the unique age groupings.

Includes hearing impairments, other health impairments, visual impairments, multiple disabilities, deaf blindness, and traumatic brain injury.

---

**PLS-5 Clinical Study: Developmental Language Delay**

<table>
<thead>
<tr>
<th>Scales and Total</th>
<th>N</th>
<th>Mean Dev. Lang. Delay</th>
<th>Mean Nonclinical Matched Sample</th>
<th>Diff.</th>
<th>t</th>
<th>Standard Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditory Comprehension</td>
<td>23</td>
<td>74.0</td>
<td>96.4</td>
<td>22.4</td>
<td>5.45**</td>
<td>1.70</td>
</tr>
<tr>
<td>Expressive Communication</td>
<td>23</td>
<td>79.3</td>
<td>97.9</td>
<td>18.6</td>
<td>4.37**</td>
<td>1.35</td>
</tr>
<tr>
<td>Total Language</td>
<td>23</td>
<td>75.3</td>
<td>97.0</td>
<td>21.7</td>
<td>4.98**</td>
<td>1.57</td>
</tr>
</tbody>
</table>

**p<.01**
Diagnostic Accuracy and Clinical Use

- **Sensitivity** — in classification of disorders, the cases in which a disorder is detected, when it is, in fact, present.*

- **Specificity** — in classification of disorders, the cases for which a diagnosis of disorder is rejected when rejection is warranted.*

*Standards for Educational & Psychological Testing (1999)

<table>
<thead>
<tr>
<th>Cut Score SD and Predictive Power</th>
<th>Matched Sample 50%</th>
<th>Matched Sample 50%</th>
<th>Matched Sample 50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC</td>
<td>EC</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>-1 SD</td>
<td>PPP</td>
<td>.83</td>
<td>.86</td>
</tr>
<tr>
<td></td>
<td>NPP</td>
<td>.77</td>
<td>.85</td>
</tr>
<tr>
<td>-1.5 SD</td>
<td>PPP</td>
<td>.93</td>
<td>.94</td>
</tr>
<tr>
<td></td>
<td>NPP</td>
<td>.66</td>
<td>.75</td>
</tr>
<tr>
<td>-2 SD</td>
<td>PPP</td>
<td>.96</td>
<td>.95</td>
</tr>
<tr>
<td></td>
<td>NPP</td>
<td>.60</td>
<td>.63</td>
</tr>
</tbody>
</table>

Note. PPP is Positive Predictive Power and NPP is Negative Predictive Power.
### PLS-5 Example:

<table>
<thead>
<tr>
<th></th>
<th>Language Disorder (.92)</th>
<th>No Language Disorder (.74)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Test Results</td>
<td>920</td>
<td>1,600</td>
<td>2,520</td>
</tr>
<tr>
<td>Negative Test Results</td>
<td>80</td>
<td>7,400</td>
<td>7,480</td>
</tr>
<tr>
<td>Total</td>
<td>1,000</td>
<td>9,000</td>
<td>10,000</td>
</tr>
</tbody>
</table>

### Changes in PLS-5 Affecting Scores

- Start points
- Age level placements
- Scores
Changes in item content can cause items to shift in difficulty or developmental age level (but doesn’t always...)

- **Content**
  - Sub-items were added, modified, or dropped
  - Administration direction changes
  - Pass criterion changes
    - Quality of responses expected
    - Number required (e.g., 3 out of 4 instead of 3 out of 5)

- **Format of the test item**
  - Task design is different (Spontaneous Play, Cloze Procedure, Structured task)
  - Picture stimuli modified (more or less complex)
  - Responses given credit

---

**PLS-4/PLS-5 Correlations**

<table>
<thead>
<tr>
<th>PLS-4</th>
<th>Auditory Comprehension</th>
<th>Expressive Communication</th>
<th>Total Language</th>
<th>PLS-4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>r</td>
<td>Adj r²</td>
<td>r</td>
<td>Adj r²</td>
</tr>
<tr>
<td>Auditory Comprehension</td>
<td>.78</td>
<td>.80</td>
<td>.65</td>
<td>.69</td>
</tr>
<tr>
<td>ExpressiveCommunication</td>
<td>.64</td>
<td>.66</td>
<td>.77</td>
<td>.80</td>
</tr>
<tr>
<td>Total Language</td>
<td>.76</td>
<td>.78</td>
<td>.78</td>
<td>.81</td>
</tr>
<tr>
<td>PLS-4 Mean</td>
<td>104.8</td>
<td>105.1</td>
<td>105.3</td>
<td></td>
</tr>
<tr>
<td>PLS-5 SD</td>
<td>14.6</td>
<td>13.5</td>
<td>13.8</td>
<td></td>
</tr>
</tbody>
</table>

Note: Adj = adjusted. All scores are based on age-norms; units are standard scores.

All correlations were corrected for the variability of the norm group, based on the standard deviation obtained on the first administration, using the variability correction of Cohen et al. (2003, p. 56)
PLS-5 vs. PLS-4 Test Results

- What can you expect?
  - Average 1-2 point differences
    * Can be as many as 8-10 point differences depending on the child's skills
  - High decision consistency
  - When the score differences are a problem: borderline eligibility
CELF Preschool–2 Assessment at Each Level

1. Identify whether or not there is a language disorder.
2. Describe the nature of the disorder.
3. Evaluate early classroom and literacy fundamentals.
4. Evaluate language and communication in context.

Summary of CELF Preschool–2 Assessment Process

Referral Question
• Is there a language disorder?

Derive This Score
• Core Language Score
  • Sentence Structure
  • Word Structure
  • Expressive Vocabulary
Summary continued

Referral Question

• What is the nature of the disorder?
  ➢ Receptive and Expressive Skills (modalities)
  ➢ Language Strengths and Weaknesses
  ➢ Syntax (structure), Morphology, Semantics

Derive These Scores

• Receptive Language Index
• Expressive Language Index
• Language Structure Index
• Language Content Index
• Language Memory Index

Index Scores

▪ Receptive Language Index (RLI)
  ▪ A measure of listening and auditory comprehension skills
  ▪ Derived by summing the scaled scores of three receptive subtests

▪ Expressive Language Index (ELI)
  ▪ A measure of overall expressive language skills
  ▪ Derived by summing the scaled scores of three expressive subtests
Index Scores (cont.)

- Language Content Index (LCI)
  - A measure of semantic development
    - Vocabulary
    - Concept development
    - Comprehension of word associations and relationships
    - Comprehension of simple and complex sentences

- Language Structure Index (LSI)
  - An overall measure of the ability to interpret and produce word and sentence structure

Summary continued

Referral Question
- How are early classroom and literacy fundamentals?

Derive these Scores
- Basic Concepts Criterion Score (Ages 5–6)
- Recalling Sentences in Story Context Percentile Range
- Phonological Awareness Criterion Score
- Pre-Literacy Rating Scale Criterion Score
Summary continued

Referral Question
• How is communication in context?

Derive this Score
• Descriptive Pragmatics Profile Criterion Score

CELF-P:2
Clinical Use of Sensitivity and Specificity

▪ Clinical sensitivity is the proportion of cases that are identified as disordered—when, in fact, they are disordered. CELF Preschool–2 sensitivity is
  • 85% at −1.0 SD

▪ Clinical specificity is the proportion of cases identified as having normal language—when, indeed, they do. CELF Preschool–2 specificity is
  • 82% at −1.0 SD
**CELF P:2 Example:**

<table>
<thead>
<tr>
<th></th>
<th>Language Disorder (.85)</th>
<th>No Language Disorder (.82)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positive Test Results</strong></td>
<td>850</td>
<td>800</td>
<td>1,650</td>
</tr>
<tr>
<td><strong>Negative Test Results</strong></td>
<td>150</td>
<td>8,200</td>
<td>8,350</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,000</td>
<td>9,000</td>
<td>10,000</td>
</tr>
</tbody>
</table>

**Standard Score Summary**

<table>
<thead>
<tr>
<th>Subtest Scaled Score</th>
<th>Core Language</th>
<th>Receptive Language</th>
<th>Expressive Language</th>
<th>Language Content</th>
<th>Language Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3–6</td>
<td>3–4</td>
<td>5–6</td>
<td>3–6</td>
<td>3–6</td>
</tr>
<tr>
<td>Sentence Structure</td>
<td>S5</td>
<td>S5</td>
<td>S5</td>
<td>S5</td>
<td>S5</td>
</tr>
<tr>
<td>Word Structure</td>
<td>WS</td>
<td>WS</td>
<td>WS</td>
<td>WS</td>
<td>WS</td>
</tr>
<tr>
<td>Expressive Vocabulary</td>
<td>EV</td>
<td>EV</td>
<td>EV</td>
<td>EV</td>
<td>EV</td>
</tr>
<tr>
<td>Concepts &amp; following Directions</td>
<td>CFD</td>
<td>CFD</td>
<td>CFD</td>
<td>CFD</td>
<td>CFD</td>
</tr>
<tr>
<td>Recalling Sentences</td>
<td>R5</td>
<td>R5</td>
<td>R5</td>
<td>R5</td>
<td>R5</td>
</tr>
<tr>
<td>Basic Concepts</td>
<td>BC</td>
<td>BC</td>
<td>BC</td>
<td>BC</td>
<td>BC</td>
</tr>
<tr>
<td>Word Classes-Receptive</td>
<td>WC-R</td>
<td>WC-R</td>
<td>WC-R</td>
<td>WC-R</td>
<td>WC-R</td>
</tr>
<tr>
<td>Word Classes-Total</td>
<td>WC-T</td>
<td>WC-T</td>
<td>WC-T</td>
<td>WC-T</td>
<td>WC-T</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Core Language Score and Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum of Subtest Scaled Scores</td>
</tr>
<tr>
<td>Standard Score</td>
</tr>
<tr>
<td>Standard Score Points, a/f</td>
</tr>
<tr>
<td>Confidence Interval (%)</td>
</tr>
<tr>
<td>Percentile Rank</td>
</tr>
<tr>
<td>Raw-Standardized Confidence Interval</td>
</tr>
</tbody>
</table>

*See Appendix C in Examiner’s Manual*
Discrepancy Comparisons

1. Determine if difference between two index scores is statistically significant.
2. If statistically significant, evaluate how rare the score difference is in the standardization sample.

Discrepancy Comparisons continued

• If the difference is $>\text{critical value}$, the difference is considered to be a true difference rather than due to measurement error or random fluctuation.
Prevalence of Difference Between Index Scores in the Standardization Sample

<p>| Table 3.6 Cumulative Prevalence (Percentage) of Differences Between Index Scores in the Standardization Sample |
|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|
| <strong>Standard Score</strong> | <strong>RLI-ELI (percentage)</strong> | <strong>LCI-LSI (percentage)</strong> | <strong>Standard Score</strong> |</p>
<table>
<thead>
<tr>
<th>Difference</th>
<th>RLI &lt; ELI</th>
<th>RLI &gt; ELI</th>
<th>LCI &lt; LSI</th>
<th>LCI &gt; LSI</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>1.5</td>
<td>1.0</td>
<td>0.8</td>
<td>0.4</td>
<td>25</td>
</tr>
<tr>
<td>24</td>
<td>1.6</td>
<td>1.3</td>
<td>0.8</td>
<td>0.6</td>
<td>24</td>
</tr>
<tr>
<td>23</td>
<td>2.1</td>
<td>1.5</td>
<td>1.4</td>
<td>1.1</td>
<td>23</td>
</tr>
<tr>
<td>22</td>
<td>2.9</td>
<td>1.9</td>
<td>1.6</td>
<td>1.5</td>
<td>22</td>
</tr>
<tr>
<td>21</td>
<td>3.4</td>
<td>2.3</td>
<td>2.3</td>
<td>2.4</td>
<td>21</td>
</tr>
<tr>
<td>20</td>
<td>3.6</td>
<td>2.6</td>
<td>2.3</td>
<td>2.4</td>
<td>20</td>
</tr>
<tr>
<td>19</td>
<td>4.1</td>
<td>3.4</td>
<td>2.9</td>
<td>2.9</td>
<td>19</td>
</tr>
<tr>
<td>18</td>
<td>5.4</td>
<td>4.1</td>
<td>3.3</td>
<td>3.3</td>
<td>18</td>
</tr>
<tr>
<td>17</td>
<td>6.4</td>
<td>4.9</td>
<td>3.9</td>
<td>4.0</td>
<td>17</td>
</tr>
<tr>
<td>16</td>
<td>7.1</td>
<td>5.6</td>
<td>4.4</td>
<td>4.8</td>
<td>16</td>
</tr>
<tr>
<td>15</td>
<td>8.3</td>
<td>7.0</td>
<td>5.5</td>
<td>5.6</td>
<td>15</td>
</tr>
<tr>
<td>14</td>
<td>9.5</td>
<td>8.0</td>
<td>5.6</td>
<td>6.6</td>
<td>14</td>
</tr>
<tr>
<td>13</td>
<td>10.6</td>
<td>10.8</td>
<td>7.5</td>
<td>8.4</td>
<td>13</td>
</tr>
<tr>
<td>12</td>
<td>12.0</td>
<td>12.8</td>
<td>8.3</td>
<td>9.9</td>
<td>12</td>
</tr>
<tr>
<td>11</td>
<td>13.8</td>
<td>16.4</td>
<td>11.5</td>
<td>11.6</td>
<td>11</td>
</tr>
</tbody>
</table>

Discrepancy Comparisons continued

**Level of Significance**

.15: broader indicator of differences between index scores.
  - Easier to find significant differences
  - More error

.05: narrower indicator and is therefore more stringent.
  - Harder to find significant differences
  - Less error
Discrepancy Comparisons continued

<table>
<thead>
<tr>
<th>Discrepancy Comparisons</th>
<th>Score 1</th>
<th>Score 2</th>
<th>Difference</th>
<th>Critical Value</th>
<th>Significant Difference (Von M)</th>
<th>Prevalence in Standardized Sample</th>
<th>Statistically Significant Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receptive-Expressive Language Index*</td>
<td>77</td>
<td>65</td>
<td>12</td>
<td>Y</td>
<td>12.3%</td>
<td>1.5%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Language Content-Structure Index*</td>
<td>79</td>
<td>57</td>
<td>22</td>
<td>Y</td>
<td>1.5%</td>
<td>1.5%</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

*See Tables 3.5–3.6.

Are score differences meaningful?

Criterion Score Chart

<table>
<thead>
<tr>
<th>Subtest</th>
<th>Raw Score</th>
<th>Criterion Score</th>
<th>Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Concepts (KC Ages 5–6)</td>
<td>17</td>
<td>≥17</td>
<td>Meets</td>
</tr>
<tr>
<td>Phonological Awareness (PA Ages 4–6)</td>
<td>15</td>
<td>219</td>
<td>Does Not Meet</td>
</tr>
<tr>
<td>Checklists</td>
<td>Raw Score</td>
<td>Criterion Score</td>
<td>Criterion</td>
</tr>
<tr>
<td>Pre-Literacy Rating Scale (PLRS)</td>
<td>83</td>
<td>≥86</td>
<td>Meets</td>
</tr>
<tr>
<td>Descriptive Pragmatics Profile (DPP)</td>
<td>93</td>
<td>≥72</td>
<td>Does Not Meet</td>
</tr>
</tbody>
</table>

Percentile Range Chart

<table>
<thead>
<tr>
<th>Subtest</th>
<th>Raw Score</th>
<th>Percentile Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recalling Sentences in Context (RSC)</td>
<td>4</td>
<td>&lt;1 to 4</td>
</tr>
</tbody>
</table>

Copyright 2016. Pearson and its Affiliates. All rights reserved.
When to choose:
PLS-5 vs. CELF P:2

Correlations:
CELF Preschool-2/PLS-5

<table>
<thead>
<tr>
<th>CELF Preschool-2</th>
<th>PLS-5</th>
<th>CELF Preschool-2</th>
<th>PLS-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Language</td>
<td></td>
<td>.65</td>
<td>.74</td>
</tr>
<tr>
<td>Expressive Language</td>
<td></td>
<td>.67</td>
<td>.76</td>
</tr>
<tr>
<td>Receptive Language</td>
<td></td>
<td>.66</td>
<td>.74</td>
</tr>
<tr>
<td>PLS-5 Mean</td>
<td>105.3</td>
<td>105.9</td>
<td>105.5</td>
</tr>
<tr>
<td>PLS-5 SD</td>
<td>12.5</td>
<td>12.2</td>
<td>12.6</td>
</tr>
</tbody>
</table>

Note: Adj = adjusted. All scores are based on age norms; units are standard scores.

All correlations were corrected for the variability of the norm group, based on the standard deviation obtained on the first administration, using the variability correction of Cohen et al. (2003, p. 58).
What is the referral question?

Which early speech and language skills has the child acquired? What are the gaps in developmental language skills?

Is this preschooler able to handle the language demands of the classroom? Which specific language skills is this preschooler missing?

At what ages can children be tested to obtain normed scores?

Birth through 7:11

3:0 through 6:11
What is the test purpose?

- **PLS-5**
  - Identify a child with a language delay or disorder that interferes with communication. Screen children for possible articulation delays.

- **CELF Preschool-2**
  - Identify a language delay or disorder that has a negative impact on classroom success.

What information about the child’s language does this test provide?

- **PLS-5**
  - A broad overview of developmental language skills (verbal and nonverbal) in language domains affecting communication. For younger children, caregivers provide information about the child’s communication abilities in the home.

- **CELF Preschool-2**
  - In-depth assessment of semantics, morphology, and syntax, with checklists used to assess pragmatics and emerging literacy.
Which tool provides the most information about the child’s level of language ability?

PLS-5 can be used to assess children with moderate to severe delays. Provides more detailed information about a child’s language skills when the child
- Is functioning at a pre-linguistic level, at a 1- or 2-word level, or using sentence structures far below the level of age-peers
- Exhibits deficits across multiple language domains
- Is placed in supported classroom environments (e.g., early childhood settings) with or without adaptations
- Has difficulty participating in regular education settings due to very limited communication skills or social interaction skills

CELF Preschool-2 can be used to assess children with mild to moderate delays. Provides more detailed information about a child’s language skills when the child
- Uses morphological and syntactic forms somewhat below the level of age-peers
- Exhibits deficits in 1-2 language domains (e.g., morphology or semantics)
- Has difficulty mastering curriculum requirements in regular education classroom environments with or without adaptations
- Has difficulty participating in classroom activities due to atypical social interaction skills

Which speech and language skills are tested?

Provides a broad survey of pre-linguistic skills through emergent literacy skills, including
- Attention to environment and people
- Gesture
- Play
- Vocal development
- Social communication
- Vocabulary
- Concepts
- Morphology
- Syntax
- Integrative language skills (e.g., analogies, inferences)
- Includes an articulation screening

In-depth assessment of preschool- and early school-level language skills in the areas of
- Vocabulary
- Concepts
- Following directions
- Word relationships
- Morphology
- Syntax
- Pragmatics
- Phonological awareness
- Pre-literacy
How is this test structured?

PLS-5

Two scales: Auditory Comprehension and Expressive Communication

CELFPreschool 2

11 subtests
Pre-Literacy Rating Scale
Descriptive Pragmatics Profile

How do I elicit language behaviors?

PLS-5

Interactive, play-based tasks using manipulatives, and simple picture pointing and question-answering formats.
There are two to six items per task.

CELFPreschool 2

Child-friendly, but highly structured tasks.
There are 13 to 24 test items per subtest.
What languages are available?

PLS-5
Preschool Language Scales—Fifth Edition

English Edition
Spanish Edition (dual language format for bilingual children)

CELF Preschool 2
Clinical Evaluation of Language Fundamentals—Preschool—Second Edition

English Edition
Spanish Edition

How similar is the normative group to my population?

Year normative sample collected: 2012
Race/ethnicity
• 53.7% White; 46.3% Non-white
Parent education
• 40.7% Parent Education: 12 years or less
• 59.4% Parent Education: 13+ years
*May not sum to 100% due to rounding

Year normative sample collected: 2002
Race/ethnicity
• 62.1% White; 37.9% Non-white
Parent education
• 45.5% Parent Education: 12 years or less
• 54.5% Parent Education: 13+ years
*May not sum to 100% due to rounding
What normative scores are available?

<table>
<thead>
<tr>
<th>PLS-5</th>
<th>CELF Preschool-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard scores, percentile ranks, age equivalents, growth scale values.</td>
<td>Standard scores, percentile ranks, age equivalents, growth scale values.</td>
</tr>
</tbody>
</table>

Why do PLS-5 and CELF Preschool-2 sometimes result in different scores?

- The two tests are normed on two different normative populations eight years apart. Demographic characteristics have shifted significantly since the publication of CELF Preschool-2 in 2003.
- PLS-5 is a play-based assessment for children at the younger ages, and provides many more verbal cues and supports than CELF-Preschool 2. CELF Preschool-2, while child-friendly, has more structured tasks and provides fewer cues and supports.
- PLS-5 provides credit for interpersonal communication-based tasks; CELF Preschool-2 normative scores are based on subtests focusing on semantics, morphology, and syntax.
Case Study: Penelope

Female

Age:
4 Years 6 Months

Case Study Points

• Head Start program and receives speech and language services for a receptive and expressive language delay.

• The child speaks Spanish-influenced English, but English is her first language and the primary language spoken in the home.

• There are no identifiable sensory, behavioral, or emotional concerns.

• The child has developmentally appropriate articulation and phonological skills.
TABLE 1: Assessment Results for Internet Case Study 1

<table>
<thead>
<tr>
<th>Scores</th>
<th>Standard Score</th>
<th>Confidence Interval</th>
<th>Percentile Rank</th>
<th>Percentile Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M = 100</td>
<td>90% Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core Language score</td>
<td>75</td>
<td>69-81</td>
<td>5</td>
<td>2-10</td>
</tr>
<tr>
<td>Receptive Language Index</td>
<td>81</td>
<td>74-88</td>
<td>10</td>
<td>4-21</td>
</tr>
<tr>
<td>Expressive Language Index</td>
<td>79</td>
<td>73-85</td>
<td>8</td>
<td>4-16</td>
</tr>
<tr>
<td>Language Content Index</td>
<td>73</td>
<td>66-80</td>
<td>4</td>
<td>1-9</td>
</tr>
<tr>
<td>Language Structure Index</td>
<td>86</td>
<td>80-92</td>
<td>18</td>
<td>9-30</td>
</tr>
<tr>
<td></td>
<td>Scaled Score</td>
<td>90% Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M = 10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sentence Structure</td>
<td>8</td>
<td>6-10</td>
<td>25</td>
<td>9-50</td>
</tr>
<tr>
<td>Word Structure</td>
<td>5</td>
<td>3-7</td>
<td>5</td>
<td>1-16</td>
</tr>
<tr>
<td>Expressive Vocabulary</td>
<td>4</td>
<td>2-6</td>
<td>2</td>
<td>0.4-9</td>
</tr>
<tr>
<td>Concepts &amp; Following Directions</td>
<td>5</td>
<td>3-7</td>
<td>5</td>
<td>1-16</td>
</tr>
<tr>
<td>Recalling Sentences</td>
<td>10</td>
<td>9-11</td>
<td>50</td>
<td>37-63</td>
</tr>
<tr>
<td>Basic Concepts</td>
<td>7</td>
<td>4-10</td>
<td>16</td>
<td>2-50</td>
</tr>
<tr>
<td>Word Classes-Receptive</td>
<td>6</td>
<td>4-8</td>
<td>9</td>
<td>2-25</td>
</tr>
<tr>
<td>Word Classes-Expressive</td>
<td>4</td>
<td>3-5</td>
<td>2</td>
<td>1-5</td>
</tr>
<tr>
<td>Word Classes-Total</td>
<td>5</td>
<td>4-6</td>
<td>5</td>
<td>2-9</td>
</tr>
</tbody>
</table>

Phonological Awareness: Did not meet criterion
Pre-Literacy Rating Scale: Did not meet criterion
Recalling Sentences in Context: 50th to 64th percentile

Questions?
For customers in the USA
1-800-627-7271
www.PearsonClinical.com
www.speechandlanguage.com
ALWAYS LEARNING
For Canadian customers,
1-866-335-6410
www.PearsonClinical.ca