

The following case studies provide examples of interpretation of CELF Preschool-2. The cases were part of the sample collected for the CELF Preschool-2 standardization and language disorder validity studies.

Case Study 1: Female, Age 4 Years 6 Months

The following scores are for a child who attends a 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

| Scores | Standard Score M = 100 SD = 15 | Confidence Interval 90% Level | Percentile Rank | Percentile Rank Confidence Interval 90% Level |
|---------------------------------|--------------------------------------|----------------------------------|-----------------|---|
| Core Language score | 75 | 69–81 | 5 | 2–10 |
| Receptive Language index | 81 | 74–88 | 10 | 4–21 |
| Expressive Language index | 79 | 73–85 | 8 | 4–16 |
| Language Content index | 73 | 66–80 | 4 | 1–9 |
| Language structure index | 86 | 80–92 | 18 | 9–30 |
| Subtests | Standard Score M = 10 SD = 3 | Confidence Interval 90% Level | Percentile Rank | Percentile Rank Confidence Interval 90% Level |
| Sentence Structure | 8 | 6–10 | 25 | 9–50 |
| Word Structure | 5 | 3–7 | 5 | 1–16 |
| Expressive Vocabulary | 4 | 2–6 | 2 | 0.4–9 |
| Concepts & Following Directions | 5 | 3–7 | 5 | 1–16 |
| Recalling Sentences | 10 | 9–11 | 50 | 37–63 |
| Basic Concepts | 7 | 4–10 | 16 | 2–50 |
| Word Classes–Receptive | 6 | 4–8 | 9 | 2–25 |
| Word Classes–Expressive | 4 | 3–5 | 2 | 1–5 |
| Word Classes–Total | 5 | 4–6 | 5 | 2–9 |

Phonological Awareness: Did not meet criterion

Pre-Literacy Rating Scales: Did not meet criterion

Recalling Sentences in Context: 60th to 64th percentile

Levels 1 and 2: Clinical Findings

Table 1 summarizes the CELF Preschool–2 Core Language, index, and subtest scores. All scores are reported with a 90% level of confidence. The Core Language score of 75 (confidence interval of 69–81) is within the low developmental range and supports the continuation of language services. The index scores of 81 for Receptive Language (confidence interval of 74–88) and 79 for Expressive Language (confidence interval of 73–85) differ by only two points, indicating similarly developed abilities in receptive and expressive skills; both scores are in the marginal developmental range. The Language Content index score of 73 (confidence interval of 66–80) and the Language Structure index score of 86 (confidence interval of 80–92) are in the low average range. The 13-point difference between the scores is significant at the .05 level and occurred in 7.5% of the standardization sample. The discrepancy between these index scores indicates a relative strength in the area of language structure.

The child's performance on all subtests that assess language content (Expressive Vocabulary, Concepts & Following Directions, Basic Concepts, Word Classes) is in the marginal to low developmental range. Based on these findings, the clinician may want to target content knowledge and use, especially as they relate to early literacy development.

Levels 3 and 4: Related Developmental Behaviors

On two measures related to emerging literacy skills, the Phonological Awareness subtest and the Pre-Literacy Rating Scale, the child's scores did not meet the criterion for her age. These results, combined with consistently weak performance on semantic (content-based) subtests, indicate that this child is seriously at risk of a language and literacy disorder. The combination of clinical and behavioral findings points to the need for continued language therapy services with a strong emphasis on emerging language and literacy. Considerable attention will need to be paid to developing early literacy skills with an emphasis on language comprehension and interactive reading activities.

Case Study 2: Female, Age 4 Years 11 Months

The following scores and information are for a child who is already receiving language intervention for a receptive and expressive language disorder through an early childhood special education program. During evaluation, there was no evidence of co-occurring articulation or phonological impairment, and the child's behavioral and emotional status was considered typical for her age. English is the primary language spoken in the home.

Table 2 Assessment Results for Internet Case Study 2

| Scores | Standard Score M = 100 SD = 15 | Confidence Interval 90% Level | Percentile Rank | Percentile Rank Confidence Interval 90% Level |
|---------------------------------|--------------------------------------|----------------------------------|-----------------|---|
| Core Language score | 86 | 80–95 | 18 | 9–30 |
| Receptive Language index | 75 | 68–82 | 5 | 2–12 |
| Expressive Language index | 85 | 79–91 | 16 | 8–27 |
| Language Content index | 77 | 70–84 | 6 | 2–14 |
| Language structure index | 82 | 76–88 | 12 | 5–21 |
| Subtests | Standard Score M = 10 SD = 3 | Confidence Interval 90% Level | Percentile Rank | Percentile Rank Confidence Interval 90% Level |
| Sentence Structure | 7 | 5–9 | 16 | 5–37 |
| Word Structure | 8 | 6–10 | 25 | 9–50 |
| Expressive Vocabulary | 8 | 6–10 | 25 | 9–50 |
| Concepts & Following Directions | 4 | 2–6 | 2 | 0.4–9 |
| Recalling Sentences | 6 | 5–7 | 9 | 5–16 |
| Basic Concepts | 5 | 2–8 | 5 | 0.4–25 |
| Word Classes–Receptive | 1 | 1–3 | 0.1 | 0.1–1 |
| Word Classes–Expressive | 4 | 3–5 | 2 | 1–5 |
| Word Classes–Total | 2 | 1–39 | 0.4 | 0.1–1 |

- Phonological Awareness:** Met criterion
- Pre-Literacy Rating Scales:** Did not meet criterion
- Descriptive Pragmatics Profile:** Met criterion
- Recalling Sentences in Context:** <1st to 4th percentile

Levels 1 and 2: Clinical Findings

Table 2 summarizes the CELF Preschool–2 Core Language, index, and subtest scores. All scores are reported with a 90% level of confidence. This child's Core Language score is 86 (confidence interval of 80–92). This score indicates performance in the low average to marginal developmental range. The Receptive Language index score of 75 (confidence interval of 68–82) is in the low developmental range, and the Expressive Language index score of 85 (confidence interval of 79–91) is in the marginal range. There is a difference of 10 standard score points between the Receptive and Expressive Language index scores. This difference is considered significant at the .15 level but is not infrequent in that it occurred in 16.9% of the standardization sample. The child's relative strength in expressive language as measured by the Expressive Language index can be used during language therapy activities to improve receptive language skills. The Language Content index score of 77 (confidence interval of 70–84) is in the low developmental range. The Language Structure index score of 82 (confidence interval of 76–88) is in the marginal developmental range. The 5-point difference between the Language Content and Language Structure index scores is not significant, according to the frequency of occurrence in the standardization sample.

Levels 3 and 4: Related Developmental Behaviors

Additional information about this child's abilities was obtained by administering the Recalling Sentences in Context supplementary subtest and the Pre-Literacy Rating Scale. The child's score on Recalling Sentences in Context is below the 5th percentile. This places her performance in the low developmental range compared to the standardization sample. Her speech-language pathologist completed the Pre-Literacy Rating Scale. The child's raw score is below the criterion score for her age, indicating weak pre-literacy skills compared to the standardization sample. In combination with the clinical findings indicating low-level performance on the Concepts & Following Directions, Basic Concepts, and Word Classes subtests, the Pre-Literacy Rating Scale results assist the clinician in deciding that the child could benefit from activities that emphasize content knowledge and use, such as interactive story telling. This child appears to be at risk for difficulty learning to read; as a result, she should receive services that emphasize developing emerging language and literacy skills.

Case Study 3: Female, Age 6 Years 10 Months

The following scores are for a child in first grade who is currently receiving language services. There are no identifiable sensory, behavioral, or emotional concerns. The child has developmentally appropriate articulation and phonological skills.

Table 3 Assessment Results for Case Study 3

| Scores | Standard Score M = 100 SD = 15 | Confidence Interval 90% Level | Percentile Rank | Percentile Rank Confidence Interval 90% Level |
|---------------------------------|--------------------------------------|----------------------------------|--------------------|---|
| Core Language score | 67 | 58-76 | 1 | 0.3-5 |
| Receptive Language index | 77 | 68-86 | 6 | 2-18 |
| Expressive Language index | 77 | 70-84 | 6 | 2-14 |
| Language Content index | 79 | 72-86 | 8 | 3-18 |
| Language structure index | 75 | 67-83 | 5 | 1-13 |
| Subtests | Standard Score M = 10 SD = 3 | Confidence Interval 90% Level | Percentile Rank | Percentile Rank Confidence Interval 90% Level |
| Sentence Structure | 4 | 1-7 | 2 | 0.1-16 |
| Word Structure | 4 | 2-6 | 2 | 0.4-9 |
| Expressive Vocabulary | 5 | 3-7 | 5 | 1-16 |
| Concepts & Following Directions | 5 | 3-7 | 5 | 1-16 |
| Recalling Sentences | 9 | 7-11 | 37 | 16-63 |
| Word Classes-Receptive | 10 | 8-12 | 50 | 25-75 |
| Word Classes-Expressive | 10 | 8-12 | 50 | 25-75 |
| Word Classes-Total | 10 | 9-11 | 50 | 37-63 |

- Basic Concepts:** Met criterion
- Phonological Awareness:** Met criterion
- Pre-Literacy Rating Scale:** Met criterion
- Descriptive Pragmatics Profile:** Met criterion
- Recalling Sentences in Context:** 35th to 39th percentile

Levels 1 and 2: Clinical Findings

Table 3 summarizes the CELF Preschool–2 Core Language, index, and subtest scores. All scores are reported with a 90% level of confidence. Her Core Language score of 67 (confidence interval of 58–76) is within the very low developmental range.

The index scores for both Receptive and Expressive Language were 77 (Receptive confidence interval of 68–86; Expressive confidence interval of 70–84), placing the child’s performance in the low developmental range. The Language Content index score of 79 (confidence interval of 72–86) is within the marginal developmental range, and the Language Structure index score of 75 (confidence interval of 67–83) is within the low developmental range.

In the subtest profile, the child’s strong performance on Recalling Sentences (scaled score = 9) and Word Classes–Receptive and Word Classes–Total (scaled score = 10 for both) should be noted. Activities that emphasize these areas of strength can be used to improve language weaknesses in other areas noted during assessment.

Levels 3 and 4: Related Developmental Behaviors

Additional information about this child’s abilities was obtained by administering CELF Preschool–2 supplementary subtests and checklists. The child’s raw scores met the criterion for each of the following: Basic Concepts, Phonological Awareness, the Pre-Literacy Rating Scale, and the Descriptive Pragmatics Profile. The Recalling Sentences in Context percentile range (35–39) also fell within the average to lowaverage range.

Given the severity of the child’s Core Language score, and the generally low performance across index scores, continued services are recommended to strengthen the child’s overall language skills and to monitor other communication and emergent literacy behaviors.

Case Study 4: Male, Age 5 Years 11 Months

The following scores are for a child who attends kindergarten. At the time of testing, the child was scheduled for a complete psycho-educational evaluation due to parental and teacher concerns about classroom performance and social interaction. During evaluation, it was noted that little change was observed in the child's affect, regardless of the topic, clinician's facial expressions, or vocal tone variation. Several articulation errors were noted during evaluation.

Table 4 Assessment Results for Case Study 4

| Scores | Standard Score M = 100 SD = 15 | Confidence Interval 90% Level | Percentile Rank | Percentile Rank Confidence Interval 90% Level |
|---------------------------------|--------------------------------------|----------------------------------|-----------------|---|
| Core Language score | 59 | 52–66 | 0.3 | 0.1–1 |
| Receptive Language index | 79 | 72–86 | 8 | 3–18 |
| Expressive Language index | 59 | 53–65 | 0.3 | 0.1–1 |
| Language Content index | 69 | 63–75 | 2 | 1–5 |
| Language structure index | 65 | 58–72 | 1 | 0.3–3 |
| Subtests | Standard Score M = 10 SD = 3 | Confidence Interval 90% Level | Percentile Rank | Percentile Rank Confidence Interval 90% Level |
| Sentence Structure | 5 | 3–7 | 5 | 1–16 |
| Word Structure | 2 | 1–4 | 0.4 | 0.1–2 |
| Expressive Vocabulary | 2 | 1–4 | 0.4 | 0.1–2 |
| Concepts & Following Directions | 5 | 3–7 | 5 | 1–16 |
| Recalling Sentences | 5 | 4–6 | 5 | 2–9 |
| Word Classes–Receptive | 10 | 8–12 | 50 | 25–75 |
| Word Classes–Expressive | 7 | 6–8 | 16 | 9–25 |
| Word Classes–Total | 8 | 7–9 | 25 | 16–37 |

| | |
|--|------------------------|
| Basic Concepts: | Did not meet criterion |
| Phonological Awareness: | Met criterion |
| Pre-Literacy Rating Scale: | Met criterion |
| Descriptive Pragmatics Profile: | Did not meet criterion |
| Recalling Sentences in Context: | <1st to 4th percentile |

Levels 1 and 2: Clinical Findings

Table 3 summarizes the CELF Preschool–2 Core Language, index, and subtest scores. All scores are reported with a 90% level of confidence. Her Core Language score of 67 (confidence interval of 58–76) is within the very low developmental range.

The index scores for both Receptive and Expressive Language were 77 (Receptive confidence interval of 68–86; Expressive confidence interval of 70–84), placing the child's performance in the low developmental range. The Language Content index score of 79 (confidence interval of 72–86) is within the marginal developmental range, and the Language Structure index score of 75 (confidence interval of 67–83) is within the low developmental range.

In the subtest profile, the child's strong performance on Recalling Sentences (scaled score = 9) and Word Classes–Receptive and Word Classes–Total (scaled score = 10 for both) should be noted. Activities that emphasize these areas of strength can be used to improve language weaknesses in other areas noted during assessment.

Levels 3 and 4: Related Developmental Behaviors

Additional information about this child's abilities was obtained by administering the CELF Preschool–2 supplementary subtests and checklists. The child's raw scores met criterion on both measures of emerging literacy, the Phonological Awareness subtest and the Pre-Literacy Rating Scale. The child's raw scores did not meet criterion on the Basic Concepts subtest or the Descriptive Pragmatics Profile. The percentile range (<1st to 4th percentile) on Recalling Sentences in Context was in the very low range.

CELF Preschool–2 results indicate that the child's acquisition of basic concepts is delayed, as was noted with other measures of language content. The child's very low performance on Recalling Sentences in Context was similar to his performance on Recalling Sentences, indicating that the ability to recall sentences did not improve with supporting context.

A number of problematic communicative behaviors were identified on the Descriptive Pragmatics Profile. When combined with the unusual social communicative behaviors noted during CELF Preschool–2 administration, these results support the need for a more in-depth evaluation of the child's social communication skills.

Given the severity of the child's Core Language score and the weak performance across index scores and supplementary measures, speech and language services are recommended to strengthen the child's overall language skills and to stimulate emerging literacy and communication skills. Based on the articulation errors noted during evaluation, it is recommended that the child receive a more comprehensive articulation and phonological evaluation.

Case Study 5: Male, Age 5 Years 3 Months

The following scores are for a child who attends kindergarten and was referred by his teacher for a language evaluation due to concern about classroom communication. He has lived in an urban community in a large metropolitan city since birth. There are no identifiable sensory, behavioral, or emotional concerns.

Table 5 Assessment Results for Case Study 5

| Scores | Standard Score M = 100 SD = 15 | Confidence Interval 90% Level | Percentile Rank | Percentile Rank Confidence Interval 90% Level |
|---------------------------------|--------------------------------------|----------------------------------|-----------------|---|
| Core Language score | 83 | 76–90 | 13 | 5–25 |
| Receptive Language index | 91 | 84–98 | 27 | 14–45 |
| Expressive Language index | 81 | 75–87 | 10 | 5–19 |
| Language Content index | 89 | 83–95 | 23 | 13–37 |
| Language structure index | 80 | 73–87 | 9 | 4–19 |
| Subtests | Standard Score M = 10 SD = 3 | Confidence Interval 90% Level | Percentile Rank | Percentile Rank Confidence Interval 90% Level |
| Sentence Structure | 8 | 6–10 | 25 | 9–50 |
| Word Structure | 5 | 3–7 | 5 | 1–16 |
| Expressive Vocabulary | 8 | 6–10 | 25 | 9–50 |
| Concepts & Following Directions | 9 | 7–11 | 37 | 16–63 |
| Recalling Sentences | 7 | 5–9 | 16 | 5–37 |
| Word Classes–Receptive | 9 | 7–11 | 37 | 16–63 |
| Word Classes–Expressive | 7 | 6–8 | 16 | 9–25 |
| Word Classes–Total | 8 | 7–9 | 25 | 16–37 |

- Basic Concepts:** Met criterion
- Phonological Awareness:** Met criterion
- Pre-Literacy Rating Scale:** Met criterion
- Descriptive Pragmatics Profile:** Met criterion
- Recalling Sentences in Context:** <10th to 14th percentile

Levels 1 and 2: Clinical Findings

Table 5 summarizes the CELF Preschool–2 Core Language, index, and subtest scores. All scores are reported with a 90% level of confidence. The Core Language score of 83 (confidence interval of 76–90) is within the marginal developmental range. The Receptive Language index score of 91 (confidence interval of 84–98) is in the average range, while the Expressive Language index score of 81 (confidence interval of 75–87) is in the marginal developmental range. The 10-point difference between the Receptive and Expressive Language index scores is not significant at the .05 level and occurred in 19% of the standardization sample. The Language Content index score of 89 (confidence interval of 83–95) is in the average developmental range. The Language Structure index score of 80 (confidence interval of 73–87) is in the marginal range. The 9-point difference between the scores is not significant at the .05 level and not infrequent in that it occurred in 16.5% of the standardization sample.

The child's performance on the Word Structure, Recalling Sentences, and Word Classes–Expressive subtests is in the marginal developmental range. Performance on other subtests is within the average range.

Levels 3 and 4: Related Developmental Behaviors

The child's scores met criterion for the Basic Concepts and Phonological Awareness subtests and on the Pre-Literacy Rating Scale and Descriptive Pragmatics Profile. The percentile range (10th to 14th percentile) on the Recalling Sentences in Context subtest indicates marginal performance.

Clinician's Note: Because many of the child's responses to the Word Structure, Recalling Sentences, and Word Classes subtests could be considered typical of children who use African-American English (e.g., horse/ horses, hisself/himself), consider administering the *Diagnostic Evaluation of Language Variation– Screening Test* to determine whether the child's language variations are due to regional or cultural patterns or are true markers of language disorder or delay.