

Mrs. [redacted] was first concerned about [redacted]'s speech at the age of 2 years. She also reported that he had difficulties with fine motor coordination at 2 years.

[redacted] resides at home with his mother, father, and twin brother. English is the primary language spoken at home. He recently completed the 1st grade at [redacted] School in Miami and will begin the 2nd grade in the Fall.

[redacted]'s visual acuity was evaluated on [redacted] by Dr. [redacted]. Results indicated improvements in his visual acuity, tracking, and fixation skills. Mrs. [redacted] stated that he will continue to receive vision therapy at The [redacted] School two times weekly during the school year.

[redacted] is currently receiving individual language therapy two times weekly for thirty minute sessions with Dr. [redacted], a speech language pathologist, at the Clinics for Speech Language and Communication Disorders. The primary focus of these sessions is to increase his ability to recall information (auditory memory), construct compound sentences, form associations, and categorize items.

Mrs. [redacted] reported that [redacted] has made significant academic progress since Fast ForWord regarding attention, focusing, and staying on task.

LANGUAGE:

The Clinical Evaluation of Language Fundamentals Third Edition (CELF 3) was administered to assess [redacted]'s language skills. This test has a mean of 10 and a standard deviation of +/- 3. Scores between 7 and 13 are considered to be within normal limits for his chronological age. The percentile scores indicated that he did as well as if not better than the numbers listed, which is compared to children within the same chronological age group. Results revealed the following:

Subtests	Raw Score	Standard Score	Percentile
SS	20	15	95
CD	15	8	25

WC	8	7	16
WS	21	9	37
FS	4	5	5
RS	21	7	16
LP-Supplementary	2	3	1
WA-Supplementary	3	3	1

Key: SS (Sentence Structure), CD (Concepts and Directions), WC (Word Classes), FS (Formulated Sentences), RS (Recalling Sentences), LP (Listening to Paragraphs), and WA (Word Associations)

Composites

Composites	Standard Score	Percentile
RLS	100	50
ELS	82	12
TLS	90	25

Key: RLS (Receptive Language Score), ELS (Expressive Language Score), TLS (Total Language Score)

The CELF-3 is an expressive/receptive language measure that is used to identify individuals who exhibit deficits in language. The receptive subtests include Sentence Structure (SS), Concepts and Directions (CD), and Word Classes (WC). On the subtest Sentence Structure, which measures the ability to understand changes in meaning within various sentence structures, he obtained a standard score of 15, which is within two standard deviations above the mean. On subtest Concepts and Directions, which measures the ability to follow directions, he obtained a standard score of 8. On subtest Word Classes, which evaluates the ability to form word associations and the ability to perceive relationships in the meaning of words, he obtained a standard score of 7. Overall, scored within normal limits on receptive subtests Concepts and Directions and Word Classes. His score on subtest Sentence Structure was above average for his chronological age. The expressive subtests include Word Structure (WS), Formulated Sentences (FS), and Recalling Sentences (RC). On subtest Word Structure, which measures the ability to express and comprehend differences in meaning with grammatical markers, he obtained a standard score of 9. On subtest Formulated Sentences, which measures the ability to plan and produce sentences, he obtained a standard score of 5, which is within two standard deviations below the mean. On subtest Recalling Sentences, which measures the ability to immediately recall spoken language, he obtained a standard score of 7. Overall, scored within normal limits on expressive subtests Word Structure and Recalling Sentences. His score on subtest Formulated Sentences was reduced for his chronological age. On supplementary subtest Listening to Paragraphs (LP), which evaluates the ability to listen and comprehend material, he obtained a standard score of 3, which is within three standard deviations below the mean.

The composite scores consist of the Receptive Language Score (RLS), Expressive Language Score (ELS), and Total Language Score (TLS). With a mean of 100 and a standard deviation of +/- 15, scores between 85 and 115 are considered to be within

normal limits for his chronological age. The Receptive Language Score (RLS), which comprises the sum of the standard scores on the Sentence Structure, Concepts and Directions, and Word Classes subtests, measures the ability to use listening comprehension skills. The Expressive Language Score (ELS), which comprises the sum of the standard scores on the Word Structure, Formulated Sentences, and Recalling Sentences subtests, measures the ability to use oral/expressive language. The Total Language Score (TLS) comprises the sum of the Receptive and Expressive Language Scores. He obtained a Receptive Language Score of 100 and a Total Language Score of 90. He obtained an Expressive Language Score of 82, which is within two standard deviations below the mean. In general, Expressive Language Score was reduced for his chronological age.

Overall, results from the CELF 3 indicated that [redacted] has deficits in expressive language, particularly formulating sentences. He demonstrated the ability to understand changes in meaning within various sentence structures, the ability to follow directions, the ability to form word associations and to perceive relationships in the meaning of words, the ability to express and comprehend differences in meaning within grammatical markers, and the ability to immediately recall spoken language. He did not demonstrate the ability to plan and produce sentences, the ability to listen and comprehend material, and the ability to organize items based on meaning as well as the ability to rapidly name members of a semantic class.

The Comprehensive Test of Phonological Processing (CTOPP) Ages 5 and 6 was previously administered on [redacted], to assess [redacted]'s phonological skills. This test has a mean of 10 and a standard deviation of +/- 3. Scores between 7 and 13 are considered to be within normal limits for his chronological age. The percentile scores indicated that he did as well as if not better than the numbers listed, which is compared to children within the same chronological age group. Results indicated the following:

Subtests

Core	Raw Score	Age Equiv.	Grade	%tile	Std. Score
EL	2	5-0	k.0	9	6
BW	4	5-9	k.7	25	8
RO	89	6-6	1.4	25	8
MD	10	5-6	k.4	37	8
NR	3	<5.0	<k.0	9	6

Key: EL (Elision), BW (Blending Words), RO (Rapid Object Naming), MD (Memory for Digits), NR (Nonword Repetition)

The Comprehensive Test of Phonological Processing (CTOPP) Ages 7-24 was used during the current evaluation to reassess phonological skills. Results revealed the following:

Subtests

Core	Raw Score	Age Equiv.	Grade Equiv.	% tile	Std. Score
EL	5	6-3	1.2	25	8
BW	9	7-0	2.0	37	9
MD	8	5-3	k.2	9	6
RD	81	5-9	k.7	16	7
NR	4	<5.-0	<k.0	9	6

Key: EL (Elision), BW (Blending Words), MD (Memory for Digits), RD (Rapid Digit Naming), NR (Nonword Repetition)

Subtests

Supplemental	Raw Score	Age Equiv.	Grade Equiv.	%tile	Std. Score
RC	-	-	-	-	-
PR	-	-	-	-	-
RO	144	<5.0	<k.0	1	3
BN	2	5-9	k.7	16	7
SW	5	7-0	2.0	25	8
SN	4	7-0	2.0	16	7

Key: RC (Rapid Color Naming), PR (Phoneme Reversal), RO (Rapid Object Naming), BN (Blending Nonwords), SW (Segmenting Words), SN (Segmenting Nonwords)

The CTOPP is a phonological measure that evaluates an individual's phonological awareness, phonological memory, and rapid naming skills. The core tests include Elision (EL), Blending Words (BW), Memory for Digits (MD), Rapid Digit Naming (RD), and Nonword Repetition (NR). On the Elision subtest, which measures the ability to remove phonological segments from spoken words to form other words (e.g. cup without the /k/ is "up"), he obtained a standard score of 8, an age equivalent of 6-3, a grade equivalent of 1.2, and a percentile rank of 25. On Blending Words, which evaluates the ability to synthesize sounds to form words (e.g. /t-oy/= toy), he obtained a standard score of 9, an age equivalent of 7-0, a grade equivalent of 2.0, and a percentile rank of 37. On Memory for Digits, which measures the ability to repeat numbers accurately, he obtained a standard score of 6, which is within two standard deviations below the mean. He received an age equivalent of 5-3, a grade equivalent of k.2, and a percentile rank of 9. On Rapid Digit Naming, which evaluates the ability to rapidly name digits, he obtained a standard score 7, an age equivalent 5-9, a grade equivalent of k.7, and a percentile rank of 16. On Nonword Repetition, which measures the ability to repeat nonwords accurately, he obtained a standard score of 6, which is within two standard deviations below the mean. He received an age equivalent of <5-0, a grade equivalent of <k.0, and a percentile rank of 9. Overall, scores on core subtests Memory for Digits and Nonword Repetition were reduced for his chronological age.

The supplemental subtests include Rapid Color Naming (RC), Phoneme Reversal (PR), Rapid Object Naming (RO), Blending Nonwords (BN), Segmenting Words (SW), and Segmenting Nonwords (SN). On Rapid Color Naming, which measures the ability to rapidly name colors, scores could not be tabulated because the ceiling was reached (e.g. had 4 + errors on Form A of this subtest). On Phoneme Reversal, which measures the ability to say phonemes in reverse order to form a word (e.g. "Say na, as in nap. Now tell me what word you get if you say na backwards, which is an") scores could not be tabulated because could not correctly answer any of the practice items that were presented to him. On Rapid Object Naming, which measures the ability to rapidly name objects, he obtained a standard score of 3, which is within three standard deviations below the mean, an age equivalent of <5.0, a grade equivalent of <k.0, and a percentile rank of 1. On Blending Nonwords, which measures the ability to synthesize sounds to form nonwords (e.g. "What made-up word do these sounds make? /g-it/= git), he obtained a standard score of 7, an age equivalent of 5.9, a grade equivalent of k.7, and a percentile rank of 16. On Segmenting Words, which evaluates the ability to segment words into phonemes (e.g. "Say it. Now say it one sound at a time /i-t/), he obtained a standard score of 8, an age equivalent of 7-0, a grade equivalent of 2.0, and a percentile rank of 25. On Segmenting Nonwords, which evaluates the ability to segment nonwords into phonemes (e.g. "Say ma. Now say ma one sound at a time /m-a/), he obtained a standard score of 7, an age equivalent of 7-0, a grade equivalent of 2.0, and a percentile rank of 16. Overall, 's score on supplemental subtest Rapid Object Naming was reduced for his chronological age.

In general, the results from the CTOPP indicated that have deficits in phonological processing, particularly memory for digits, nonword repetition, and rapid object naming. He demonstrated the ability to remove phonological segments from spoken words to form other words, the ability to synthesize sounds to form words, the ability to synthesize sounds to form nonwords, the ability to repeat and say words one sound at a time, and the ability to repeat and say nonwords one sound at a time. He did not demonstrate the ability to repeat numbers accurately, the ability to repeat nonwords accurately, and the ability to rapidly name objects. Previous performance on the CTOPP Ages 5 and 6 indicated that demonstrated the ability to synthesize sounds to form words, the ability to rapidly name objects, and the ability to repeat numbers accurately. He did not demonstrate the ability to remove phonological segments from spoken words to form other words and the ability to repeat nonwords accurately. Overall, 's previous scores on core subtests Elision and Nonword Repetition were reduced for his age.

NARRATIVE ANALYSIS

A structured and unstructured narrative was elicited during the evaluation. During the structured narrative, was given a picture of a carnival scene and instructed to tell a story about what was happening in the picture. He produced a story that contained additive chains, which are generally produced by 3 years, are arranged in any order, have no dependency, no temporal/causal dependency, and contain listings, repeated actions, and descriptive sentences. According to Rhea Paul's *Language Disorders from Infancy through Adolescence: Assessment and Intervention*, children between the ages

of 7 and 11 years should produce stories that are classified as multiple causal chains. These chains consist of more than one episode and may have embedded/conjoined sentences. However, he did not demonstrate the ability to produce a story that had multiple causal chains. Story grammar analysis indicated that _____'s story did not have an initiating event, an attempt, consequence, a plan, internal response, reaction, or an ending. Analysis of listener friendly devices indicated that _____'s story did not have any appendages, which are openings or closings. Analysis of cohesive devices indicated that his story had reference cohesion (e.g. "The little girl right there is trying to get up. But she can not.") and additive conjunctions (e.g. "and"), which according to Rhea Paul, are the second most frequent type of cohesion devices found in children between the ages of 7-10 years.

During the unstructured narrative, _____ was instructed to tell the clinician about his favorite movie. The clinician had to ask _____ questions numerous times in order to elicit a response from him. During his first attempt, he did not provide a response. During his second attempt, he informed the clinician that movie was called *Dinosaurs*. During his third attempt, he informed the clinician that the name of the movie is *Jurassic Park 2: The Lost World*. The clinician prompted him again by saying, "I want you to tell me about your favorite movie. Did you see Spiderman?" He informed the clinician that he only viewed a portion of the movie. However, he was unable to tell the clinician about the movie. His mother assisted the clinician by informing him that he saw *Garfield*. During this attempt, he produced a temporal chain, which consists of sequential information and no causal relations. He did not demonstrate the ability to produce an age appropriate multiple causal chain. Story grammar analysis indicated that his story did not have a setting, initiating event, internal response, plan, attempt, consequence, or reaction. Analysis of listener friendly devices indicated that his story did not have any appendages (e.g. opening/closing). However, he story did have additive conjunctions (e.g. "and"), temporal conjunctions (e.g. "then"), and reference cohesion (e.g. "And then Garfield went inside the train...and then he gotted the dog out quickly..."). Overall, _____ had to be prompted numerous times about the picture and the movie to elicit a response from him. He demonstrated the ability to produce additive and temporal chains consisting of conjunctions such as "and" and "then". He did not demonstrate age appropriate skills such as the ability to sequence events, stay on topic during an elicitation of a narrative, and produce multiple causal chains.

ARTICULATION:

An assessment of articulation and phonology was conducted informally. Both were judged to be within normal limits.

BEHAVIORAL OBSERVATIONS:

did not separate easily from his mother at first because he was self-conscious about wearing his blue socks without his sneakers. Mrs. explained to the clinicians that she accidentally brought his twin brother's shoes with her, which were too small for feet. Once the Mrs. and the clinicians informed that they would take their shoes off, he was able to accompany them into the therapy room without hesitation. was attentive at the beginning of testing but asked numerous times when the testing would be completed so he could play. While his attention span varied throughout the evaluation, he demonstrated better attention during hands on tasks than during language based and listening tasks. It was noted that when he felt challenged or overwhelmed, he would give up and indicate that he did not want to do testing anymore. Although the clinician utilized a token economy system of smiley stickers as motivators to limit off-task behaviors, it was noted that he demonstrated off-task behaviors such as discussing things not related to subtests during testing (e.g. where he lives) and other behaviors such as moving around in his chair, frequent yawning, rocking back and forth in his chair, mocking the clinician during testing, putting his hands on his face when answering, playing with the pin on his shirt, looking outside the window, and trying to manipulate any item within reach. It was also noted that did not demonstrate the ability to accurately read the messages on the smile stickers that he chose when prompted by the clinician (e.g. if the sticker said "good thinking" he would say "good job"). In addition, it was noted that coughed and had a runny nose throughout the entire evaluation and requested tissues frequently because his mother forgot to give him his allergy medication. Overall, his cooperation was good although some cajoling, temptation of rewards (e.g. using stickers to motivate the client and informing him that he could play with legos and/or dinosaurs once testing was completed), and safety signals (e.g. "We're almost finished... only three more sections left") were needed at times to complete the subtests.

CLINICAL IMPRESSIONS:

Based on results of formal and informal assessments, clinical observations, and parental report, , a 7-year 4-month old boy, presents with a receptive and expressive language delay characterized by deficits in the following directions, phonological awareness, sentence construction, vocabulary, and composition of narratives as evidenced on the Clinical Evaluation of Language Fundamentals Third Edition (CELF 3), the Comprehensive Test of Phonological Processing (CTOPP), and his structured/unstructured narrative. Comparison of his previous CTOPP scores to current scores indicated the following: an increase in his standard score on the Elision subtest from 6 to 8, an increase in his standard score on the Blending Words subtest from 8 to 9, a decrease in his standard score on Rapid Object Naming from 8 to 3, a

decrease in his standard score on Memory for Digits from 9 to 6, and no significant change in his standard scores on the Nonword Repetition subtest. His strengths include attention skills during hands on tasks, his ability to follow directions when visual stimuli are provided, and his verbal intellectual ability. His weaknesses include reading skills, following directions, phonological processing, narrative structure and composition, formulating sentences, and using age appropriate vocabulary. Prognosis for continued improvement is favorable at this time based on parental support and will increase with implementation of intensive language therapy.

RECOMMENDATIONS:

1. Individual language therapy two times weekly for thirty minute sessions
2. Language therapy goals should incorporate visual stimuli and focus on the following:
 - a. Increasing composition and production of age appropriate narratives
 - b. Increasing receptive language through tasks such as following directions
 - c. Increasing phonological awareness skills
 - d. Increasing age appropriate expressive vocabulary
 - e. Increasing pre-literacy skills
 - f. Increasing use and length of utterances in sentence constructions
3. Behavioral management strategies should be incorporated into therapy session
 - a. token economy (e.g. stickers)
 - b. visual schedule
4. Use ball chair that was recommended by occupational therapist during therapy sessions
5. Continue home program activities to facilitate carryover
6. Re-evaluate speech and language skills in one year