Goldman Fristoe 2
Test of Articulation

KLPA 2
Khan-Lewis Phonological Analysis

CONFIDENTIAL

Identifying Information

Name:	Cory Sunshine	Primary Language:	English		
School/Agency:	Sunshine Nursery School	Determined by:	Parents		
Gender:	Male	Date Determined:	06/14/2006		
Grade/Ed. Level:	PK				

Examiner:	Tina Radichel, MS, CCC-SLP

Age Calculation	Year	Month	Day
Test Date:	2006	6	14
Birth Date:	2001	2	13
Chronological Age:	5	4	

Parent/Guardian Information

Parent/Guardian:	Daily Sunshine	Home Language:	English
Relationship:	Mother	Determined by:	Parents
Home Address:	42 Wood Road, Apt 4A Pines, MN 55014-1796	Date Determined:	06/14/2006
Home Phone:	(651)111-1111	☐ Interpreter needed for parent	
Work Phone:	(651)222-2222		

Reason for Testing

Further analysis was needed following the administration of the GFTA-2 to develop a deeper understanding of Corey's speech sound patterns.

Goldman-Fristoe Test of Articulation-Second Edition (GFTA-2)

The Goldman-Fristoe Test of Articulation-Second Edition (GFTA-2) is a systematic means of assessing an individual's articulation of the consonant sounds of Standard American English. It provides a wide range of information by sampling both spontaneous and imitative sound production, including single words and conversational speech. The GFTA-2 has three sections: Sounds-In-Words, Sounds-In-Sentences, and Stimulability. The Sounds-In-Words section includes 53 target words that gather information on 77 consonants and consonant cluster sounds. This section also includes separate normative data for males and females aged 2 through 21. The Sounds-In-Sentences section provides a semi-structured observation of spontaneous sound production in connected speech. The Stimulability section offers a way to look at individual speech sound production through the use of visual and auditory modeling by the examiner.

Sounds-In-Words

☑ Male Norms ☐ Female Norms				
Raw Score*	Standard Score	Confidence Interval ☑ 90% ☐ 95%	Percentile	Test-Age Equivalent
29	74	68 — 80	8	3 years - 1 month

* Raw score equals the total number of errors with 77 as a possible maximum. See Chapter 4 of the GFTA-2 manual.

The Sounds-in-Words section of the GFTA-2 provides several summary normative scores. The GFTA-2 standard score provides a means to compare one individual to another based on age and gender. A percentile rank indicates the percentage of individuals in the population that performed at or below a particular score. The percentile is derived from the standard score and it permits us to determine an individual's position relative to the reference group. The Sounds-in-Words section was administered by Tina Radichel, MS, CCC-SLP on 9/24/2001. Cory produced 29 errors out of 77 sounds in the Sounds-in-Words section. When compared to other males his chronological age, this score converts to a standard score of 74. Cory's obtained standard score represents performance on the GFTA-2 Sounds-in-Words section at the 8th percentile of males his age and is considered to be in the significantly below average range. With a 90% confidence interval there is a 90% chance that Cory's true standard score falls between 68 and 80. Cory's chronological age is 5 years, 4 months and his raw score of 29 is the middle or median score for an individual 3 years, 1 month of age. In summary, Cory demonstrated 29 individually misproduced sounds on the GFTA-2. Specifically, he demonstrated 3 distortions, 2 sound deletions, 24 substitutions, and no additions to the targeted sounds.

GFTA-2 Developmental Norms

Sound	Position	% Mastery of Sound	
		Gender Total	Population Total
/ʃ/	Initial	84%	89%
/l/	Initial	85%	88%
/s/	Initial	81%	86%
/bl/	Initial	85%	86%
/l/	Medial	88%	88%
/z/	Medial	84%	87%
/ŋ/	Final	97%	96%
/l/	Final	82%	86%
/s/	Final	86%	89%

Speech sounds are mastered developmentally in a typical order as people grow and learn. A large and well-controlled sample allows valid judgments about individual performance in developmental acquisition of sounds. A criterion of 85% was used to determine significance and need for planning. In other words, if 85% or more of Cory's age or age and gender peers have mastered a sound in a specific position and Cory has not, then it may be a sound that requires intervention. The previous table and the chart at the end of this report list the sounds misproduced by Cory and the percentage of his age and gender peers that successfully articulate the sound.

GFTA-2 Sounds-In-Sentences

Initial Position Errors: 13	Medial Position Errors: 2	Final Position Errors: 3
/ʃ/, /l/, /r/, /θ/, /s/, /ð/, /bl/, /br/, /dr/, /fl/, /fr/, /pl/, /sl/	/r/, /θ/	/ŋ/, /r/, /θ/

The Sounds-in-Sentences section was administered and results were tallied. Cory produced 13 error(s) in the initial position, 2 error(s) in the middle position, and 3 error(s) in the final position during connected speech.

GFTA-2 Stimulability

		Correctly Reproduced	Incorrectly Reproduced
Initial	**Syllable**	/l/, /r/, /θ/, /s/	/ʃ/, /ð/
	Word	/θ/	/r/, /s/
	Sentence	/θ/, /s/	
Medial	**Syllable**	/r/	/θ/, /s/, /ð/
	Word	/s/	/θ/
	Sentence		/ŋ/, /θ/, /s/
Final	**Syllable**	/r/, /θ/	
	Word		/r/
	Sentence	/θ/	

The Stimulability section is only administered for each sound in each position that Cory misproduced in one or both of the previous GFTA-2 sections. Of the 47 sound errors produced in Sounds-in-Words and Sounds-in-Sentences, each was tested at the syllable, word, and sentence levels. The previous chart displays the sounds Cory correctly produced under stimulability (i.e., prompting or visual or auditory modeling).

Khan-Lewis Phonological Analysis-Second Edition (KLPA-2)

The Khan-Lewis Phonological Analysis-Second Edition (KLPA-2) is a norm-referenced analysis of an individual's speech development and phonological process usage. The analysis is used to identify frequency of usage of ten distinct phonological processes grouped into three categories (Reduction Processes, Place & Manner Processes, and Voicing Processes), and any other processes used by the individual. The KLPA-2 requires the administration of the 53 target words of the Goldman-Fristoe Test of Articulation-Second Edition (GFTA-2). The target words are analyzed for any sound changes and the sound changes are classified by phonological process. The total number of sound changes is converted into a series of scores based on age- and gender-based norms.

KLPA-2 Summary

Raw Score*	Standard Score	Confidence Interval ☑ 90% ☐ 95%		Percentile	Test-Age Equivalent
25	86	81	— 91	14	3 years - 8 months

☑ Male Norms   ☐ Female Norms

Overall Intelligibility: ☐ Good   ☑ Fair   ☐ Poor

The Khan-Lewis Phonological Analysis-Second Edition (KLPA-2) was administered by Tina Radichel, MS, CCC-SLP on 9/24/2001. Qualitatively, the examiner's impression of Cory's overall intelligibility is fair. Quantitatively, when compared to his age and gender peers, his raw score converts to a standard score of 86 and reflects overall intelligibility at or better than 14% of males his age which is in the below average range. To account for errors in measurement, a confidence interval of 90% was applied to the standard score. This confidence interval means that there is a 90 chance that Cory's true standard score falls within the range of 81 - 91. Finally, a test-age equivalent can be obtained based on the raw score. The test-age equivalent represents the age in years and months at which Cory's raw score is the middle or median score. In other words, Cory's raw score of 25 is the median score for children 3 years, 8 months of age. In summary, Cory demonstrated 41 individually misproduced sounds on the KLPA-2. Specifically, he demonstrated 5 distortions, 5 sound deletions, 31 substitutions, and no additions to the targeted sounds.

When compared to his age and gender-matched peers, Cory's consonant speech sound production ability is in the significantly below average range and his phonological process usage is in the below average range.

KLPA-2 Dialectical Influence

Dialectical influence was not the primary factor causing the articulation errors demonstrated by Cory.

KLPA-2 Vowel Alterations

On two occasions, Cory used a slightly elongated vowel production when followed by a substitution or deletion of a medial consonant.

Recommendations

1. Cory should receive speech-language services for phonological process remediation.

2. Intervention should focus on specific phonological processes that are over 40% occurrence in the test sample.

3. Cory's teacher and parents should reinforce intervention through activities at home and in the classroom.

KLPA-2 Score Summary

	Male Norms ☑	Female Norms ☐		
Raw Score*	**Standard Score**	**Confidence Interval** ☑ **90%** ☐ **95%**	**Percentile**	**Test-Age Equivalent**
25	86	81 — 91	14	3 years - 8 months

Overall Intelligibility: ☐ Good   ☑ Fair   ☐ Poor

	Reduction Processes					**Place & Manner Processes**			**Voicing Processes**	
	Deletion of Final Consonants	Syllable Reduction	Stopping of Fricatives and Affricates	Cluster Simplification	Liquid Simplification	Velar Fronting	Palatal Fronting	Deaffrication	Initial Voicing	Final Voicing
Percent Occurrence	of 44 =	of 26 =	1 of 31 = 3	1 of 26 = 4	16 of 31 = 52	6 of 19 = 32	of 9 =	of 6 =	1 of 26 = 4	of 32 =

ERR	ITEMS	%AGE	Phonological Process	ERR	ITEMS	%AGE	Phonological Process
	of 53 =		Addition of consonants		of 26 =		Initial devoicing
	of 27 =		Affrication	2	of 44 =	5	Labialization
	of 53 =		Backing to velars or /h/		of 53 =		Liquidization
	of 53 =		Consonant harmony		of 19 =		Medial devoicing
	of 24 =		Denasalization		of 6 =		Medial voicing
	of 52 =		Deletion of initial consonants		of 52 =		Nasalization
	of 24 =		Deletion of medial consonants	4	of 35 =	11	Palatalization
	of 48 =		Frication		of 8 =		Stopping of glides
	of 12 =		Final voicing		of 27 =		Stopping of liquids
	of 25 =		Gliding of fricatives and affricates		of 24 =		Stopping of nasals
	of 9 =		Gliding of nasals	2	of 51 =	4	Stridency addition
	of 33 =		Gliding of stops		of 28 =		Stridency deletion
	of 53 =		Glottal replacement				

GFTA-2 Developmental Norms

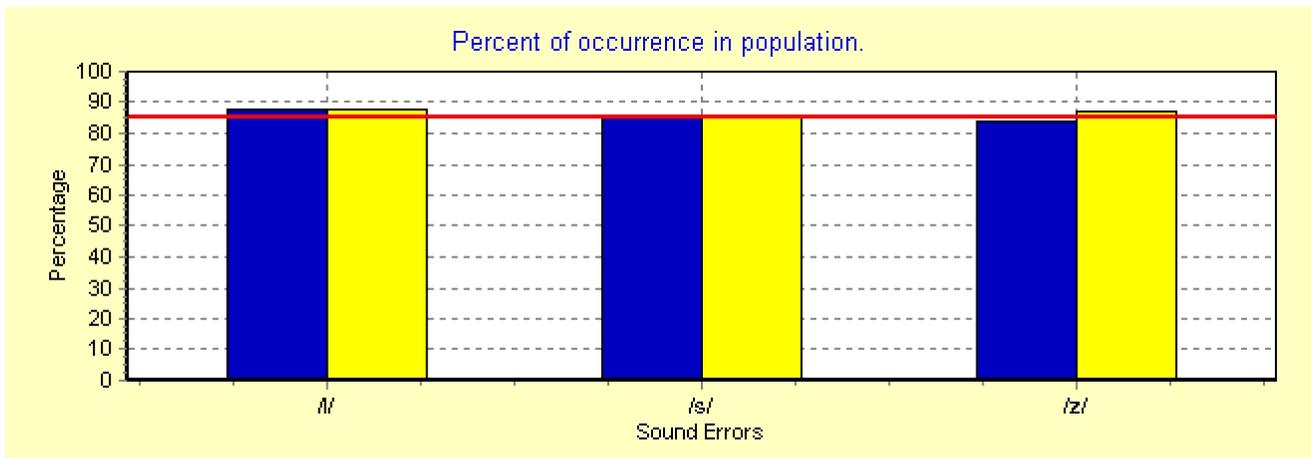■ **Male Total**   □ **Population Total**

Initial Position Errors
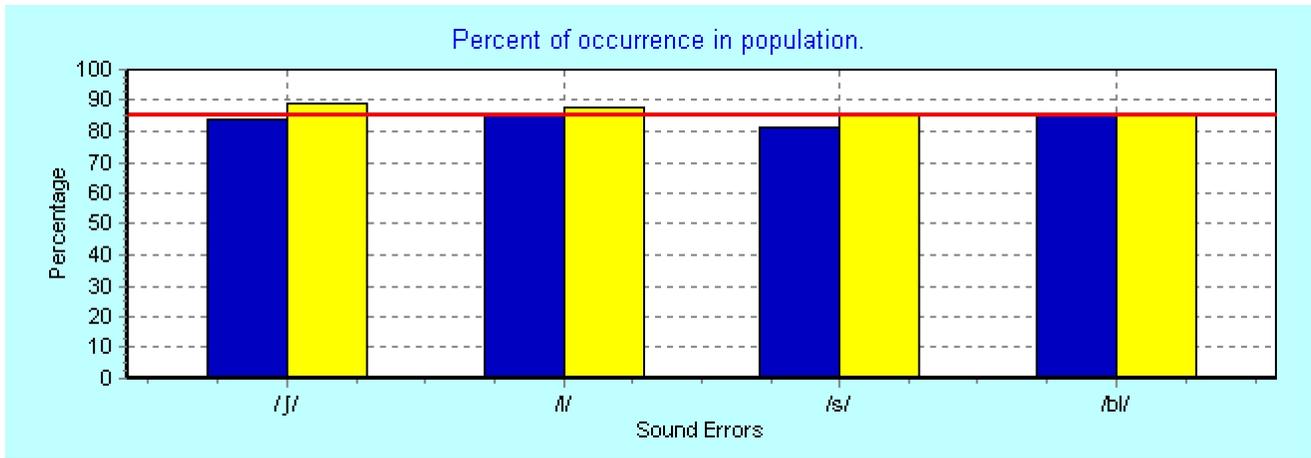
Medial Position Errors

Final Position Errors