Phonological Analysis & Treatment Targets 2.0

Name: _____ **Grade:** _____ **Age:** _____ **Analysis Date:** _____

Part 1. Analysis

Complete the following analysis using transcriptions from a representative speech sample. The success of a treatment/intervention program depends entirely on the overall assessment of the sound system. This analysis based on a speech sample is one part of a thorough assessment.

1. **Phonetic Inventory (IN phones)**. Circle the phones in the child's phonetic inventory that occurred twice or more in the sample. Write in and circle any other allophones or non-target phones that also occurred (e.g., pʰ, t̪s, s̪ or wʳ). See the manual for additional guidance. List OUT phones to the right.

	Bilabial	Labio-dental	Inter-dental	Alveolar	Palato-Alveolar	Palatal	Velar	Glottal
Stops	p b			t d			k g	
Fricatives		f v	θ ð	s z	ʃ ʒ			
Affricates					ʧ ʤ			
Nasals	m			n			ŋ	
Liquids				l		r		
Glides	w					j		h

OUT Target Phones

2. **Phonemic Inventory (IN phonemes)**. Circle the phonemes from the child's *phonetic* inventory that showed a contrast in meaning at least twice in the sample to determine the *phonemic* inventory. Typically, this is done by identifying minimal pairs (e.g., *pat* and *bat*). See the manual for additional guidance on identifying phonemes. Write in and circle any other non-ambient phonemes that also occurred (e.g., t̪s, s̪ or wʳ). List OUT phonemes to the right.

	Bilabial	Labio-dental	Inter-dental	Alveolar	Palato-Alveolar	Palatal	Velar	Glottal
Stops	p b			t d			k g	
Fricatives		f v	θ ð	s z	ʃ ʒ			
Affricates					ʧ ʤ			
Nasals	m			n			ŋ	
Liquids				l		r		
Glides	w					j		h

OUT Target Phonemes

3. **Word Initial Cluster Inventory (IN clusters).** Circle the word-initial clusters that occurred at least twice in the sample. Clusters are organized by sonority distance. Write in and circle any other non-ambient (i.e., not used in English) clusters that also occurred twice (e.g., pw- [6], tl- [5], bw- [5], dw- [5], fw- [4], θw- [4]). See the manual for additional guidance on identifying a word-initial cluster inventory.

SD=6	SD=5	SD=4	SD=3	SD=2	SD=-2	/s/CC
tw-	bj-	br-	fr-	mj-	sp-	skw-
kw-	pr-	dr-	θr-	sm-	st-	spr-
pj-	tr-	gr-	ʃr-	sn-	sk-	str-
kj-	kr-	bl-	fl-			skr-
	pl-	gl-	sl-			spl-
	kl-	fj-	vj-			
		sw-				

OUT Target Clusters
SD=6
SD=5
SD=4
SD=3
SD=2
SD=-2
/s/CC

4. **Stimulability.** Record stimulability of OUT phones from (1) above. Use a stimulability task to gain information about what sounds a child can produce with some level of support. See the manual for additional guidance on stimulability tasks.

Stimulable OUT phones: _____ Nonstimulable OUT phones: _____

Part 2. Intervention Target Selection

Guiding Principles

A good intervention target represents new area(s) of speech sound knowledge for the child. By teaching a previously unknown target, the child's phonological system is more likely to expand. This form of broad generalization can result in improvement to untreated sounds and sequences, especially if implicational language laws indicate that the target cluster or singleton is more complex relative to other sound structures.

Procedures

The following step-by-step procedures use the analyses conducted in Part 1 to identify gaps in a child's phonological knowledge. This is combined with implicational language laws and treatment research (see User Manual for additional details) to recommend ideal intervention targets for stimulating broad phonological growth *(adapted from Gierut, 2004; Morrisette, Farris, & Gierut, 2006)*.

Step 1 will determine if 3-element /s/CC clusters are appropriate targets. If not, proceed to **Step 2** to determine if 2-element CC clusters are appropriate. When appropriate, cluster targets are recommended to maximize broad generalization from intervention. If not, **Step 3** will determine appropriate singleton targets.

Step 1. **Determine if (3-element) /s/CC clusters are appropriate targets.** Are **ALL** /s/CC clusters present in the Cluster Inventory? (Refer to (3) in **Part 1**.)

Yes. Then /s/CC clusters aren't appropriate targets. Go on to **Step 2**.

No. Then /s/CC clusters may be appropriate targets, but phonemic knowledge of each consonant in the cluster (except /s/) may be necessary for greater phonological growth to occur (see manual for additional details). Answer questions (a) and (b) below.

a. **Is /p/ or /t/ or /k/ an IN phoneme?** (Refer to (2) under **Part 1**.) If **yes**, list: _____ (C2)

b. **Is /w/ or /l/ or /r/ an IN phoneme?** (Refer to (2) under **Part 1**.) If **yes**, list: _____ (C3)

If you answered **No** to (a) or (b), then /s/CC clusters aren't appropriate targets. Go on to **Step 2**.

If you answered **Yes** to (a) and (b), /s/CC clusters may be appropriate targets if the IN phonemes can occur as C2 and C3 (respectively) in any of the clusters below. If so, **circle** the relevant cluster(s). These are your intervention target(s), and you can now go on to **Part 3: Monitoring**.

If the IN phonemes don't form any of the clusters below, then /s/CC aren't appropriate. Go on to **Step 2** to continue with target selection.

/s/CC Targets: skw- spr- str- skr- spl-

Step 2. **Determine if (2-element) CC clusters are appropriate targets.** Refer back to (3) in **Part 1**. Using the chart below, follow steps (a) through (d), in order.

Cluster Target Pool

SD=6	SD=5	SD=4	SD=3	SD=2	SD=-2
tw-	bj-	br-	fr-	mj-	sp-
kw-	pr-	dr-	θr-	sm-	st-
pj-	tr-	gr-	ʃr-	sn-	sk-
kj-	kr-	bl-	fl-		
	pl-	gl-	sl-		
	kl-	fj-	vj-		
		sw-			

* CC clusters with /s/ or /j/ are not considered in the potential target pool because these may not result in improvement to other cluster types. See the manual for further details.

a. Cross out all IN clusters (Refer to (3) under **Part 1**.). Ignore grey shaded clusters. If your pool is now empty, go on to **Step 3**; otherwise, go on to (c).

b. If your pool is now empty, go on to **Step 3**; otherwise, go on to (c).

c. From your revised Cluster Target Pool, circle the remaining clusters with the smallest sonority distance. In other words, SD=3 are preferred targets. If none remain, choose SD=4 clusters, followed by SD=5 clusters. These are your potential CC intervention target(s); enter them below.

d. If multiple targets are listed below, circle or highlight clusters for which the child has least phonological knowledge. Clusters with the most non-stimulable sounds are ideal, followed by sounds absent from the phonetic or phonemic inventory. Otherwise, low-accuracy sounds are preferrable to high-accuracy sounds. Clusters with least-known segments are optimal targets. You can now go on to **Part 3: Progress Monitoring**.

CC Target(s): _____

Step 3. **Consider the singleton inventory.** Enter all OUT phones below, as based on your Phonetic Inventory analysis in (1) under **Part 1**. Then follow the instructions in (a) through (c), in order. Please note that this section is primarily utilized later in intervention when children's speech sound systems are more robust. Many children present with residual errors for a few singletons.

	Bilabial	Labio-dental	Inter-dental	Alveolar	Palato-Alveolar	Palatal	Velar	Glottal
Stops								
Fricatives								
Affricates								
Nasals								
Liquids								
Glides								

a. Cross out all stimulable sounds. (Refer to (4) under **Part 1**.)

b. Cross out all early acquired sounds. This would include /p b t d k g f v m n ŋ w j h/ for English.

c. Of those remaining in your revised pool, CIRCLE those sounds that lead to greater system-wide change, based on language laws (refer to implicational laws in the manual). These are your intervention target(s), which can be taught in singleton and/or cluster contexts in real words or non-words (see manual for details related to intervention words); enter them below. You can now go on to **Part 3: Progress Monitoring**.

C Target(s): _____

Part 3. Monitoring (Treated *and* Untreated Sounds)

To evaluate change following intervention, all OUT singletons and clusters (from (1) and (3) in **Part 1**) should be monitored during baseline measures and following termination of intervention on the selected target(s). Those singletons and clusters that remain absent following intervention should be placed into the pool for target selection for the next phase of intervention.

Monitoring:

Phones	*Phonemes*	*Clusters*

Selected Intervention Target(s): _____

Determine the frequency and type of progress monitoring:

Sample Type *(e.g., conversational)* **Frequency** *(e.g., weekly)* **Next Probe Date:**