

### Speech and Language Services – Diagnostic Summary

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Name:	JB	Address:
Date of Birth:		City/Postal Code:
Parents:		Doctor:
Phone:		Assessment Date:
Referred by:		Report Date:

**Current Diagnosis:** *Moderate Articulation Difficulties and Severe Functional Expressive Delay (as previously diagnosed).*

### BACKGROUND INFORMATION

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JB, aged 5 years and 7 months presented as a friendly and social girl who liked active games and reading books. JB lives with her mother, BL and also spends time with her grandmother, BL. Both caregivers encouraged communication at home by using gestures and actions of single sounds and words.

JB took part in a 'Fun with Language' group from January to February 2009. She was assessed at 'Alberta Health Services' in March 2009, and results revealed that JB had limited skills to interact with family and peers as she had limited vocabulary, and used mostly sounds and gestures to communicate. For more information, see the 'Alberta Health Services' assessment report dated March 2009. Based on JB's diagnosis of functionally delayed speech sound development and functionally severe expressive communication delay, she qualified for 'Program Unit Funding' (PUF) for the years of 2009-2011. JB attended 'CHEEP' (Corbett Hall Early Education Program) during both the 2009-2010 and 2010-2011 school years. JB attended out-of-class therapy during both school years at 'CHEEP' and progress was made with her communication skills such that her independent requests for turn-taking increased and her ability to attend to activities also improved. During the 2010-2011 'CHEEP' school year, treatment targeted her production of s-blends (e.g., snap, wass, basket) and /z/ (e.g., zebra, zip). She made progress in saying her s-blends both at the beginning of words and in the middle of words (e.g., snap, basket). However, JB continued to replace the /z/ sound with the /s/ sound in all word positions (e.g., zebra → sebra) at the end of treatment. It was also noted by 'CHEEP' staff that JB received services through 'Child and Adolescent Services Association' (CASA) to address anxiety issues.

### ASSESSMENT RESULTS

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JB was seen on September 20th and 27th, 2011 for assessment. Her communication abilities were evaluated through an interview with her grandmother, structured play activities, and informal assessments. The results are presented below.

#### Overall Communication Ability

- JB appeared energetic but somewhat reserved (i.e., when playing she would not engage with student clinicians or with the other student in the group). As JB became more comfortable with the student clinicians and other student in the treatment group, she became more open and talkative.
- JB responded well to verbal praise and encouragement (e.g., "Way to go JB", "Keep trying your best").
- In conversation, JB was usually understood by the student clinicians. During a speech and language sample, the student clinicians estimated her intelligibility (i.e., ability to be understood) to be about 80% when the context (i.e., topic, event) was known.

Intelligibility decreased when JB talked about more abstract and unfamiliar topics (i.e., topics that student clinicians were not familiar with).

- JB benefited most from verbal and visual reminders (e.g., “Don’t forget to put your tongue behind your teeth, watch me”)
- JB used both verbal (e.g. commenting, asking questions) and nonverbal (e.g. pointing, requesting) means of communication.

#### Speech Production

- JB spoke quickly when she was excited about a topic. Her quick rate of speech often made it difficult to understand her.
- When JB was asked to repeat herself, she did so consistently. When she repeated, she generally repeated without making any changes to what she said.
- Results of informal probes were consistent with results obtained on the **Structured Photographic Articulation Test II (SPAT-D II)** administered by the ‘CHEEP’ speech language pathologist in May, 2011.

#### Speech Sound Probe Results:

Target	Example	Word Level-delayed imitation	Sentence Level-imitation
/Cs/ word final	cats	4/5 = 80%	4/5 = 80%
/z/ word initial	zoo	0/5 = 0%	1/2 = 50%
/z/ word medial	wizard	2/5 = 40%	0/1 = 0%
/z/ word final	toes	2/5 = 40%	0/2 = 0%
s-blend word initial	sky	12/12 = 100%	Not probed
s-blend word medial	basket	0/4 = 0%	1/4 = 25%
s-blend word final	desk	0/5 = 0%	0/3 = 0%

- The following speech sound patterns and errors were observed:
  - S-blend cluster reduction in the middle and at the ends of words (e.g., “baket” for basket and “mak” for mask).
  - Substitution of /s/ for /z/ or deletion of /z/ in all word position at word and sentence level (e.g., sebra for zebra, wizard for wizard (substitution) and no for nose (deletion)).
  - Both cluster reduction and substitution errors were also noted in JB’s conversational speech.
- Stimulability (i.e., the necessary help required in order for the sound to be produced correctly)
  - When cued for /z/ (i.e., giving extra support in the form of an explanation (e.g., try turning your motor on) or putting her hand on the student clinician’s throat and her throat to listen for the buzzing sound), JB had difficulty. JB produced /s/ instead of /z/ (e.g., ‘soo’ → ‘zoo’). Further investigation will be done to determine JB’s ability to produce /z/ and aid in the correct production of /z/ during the course of treatment.
  - JB’s ability to say s-blends improved when the word was broken down into parts (e.g., wa – s – p). Each individual section was produced separately with gestural cues for /s/ (i.e., finger sliding down arm), /p/ (i.e., opening hand from a closed fist and demonstrating the puff of air that is released with the sound), /t/ (i.e., tapping the front of the teeth to show tongue placement) & /k/ (i.e., touching neck to show placement).

### Pragmatic Language Ability

- JB often preferred to play alone during unstructured play activities (e.g., playing with a pirate ship). This was consistent with previous reports from 'CHEEP'.
- JB was generally quiet but commented and responded to verbal comments made by student clinicians.
- JB appeared comfortable with communicating with student clinicians and with the other child in the class.
- Her eye contact was not consistent. She made appropriate eye contact when she was fully engaged in the conversation (e.g., talking about how she wanted to decorate her star during craft time). When JB was disinterested in her conversational partner's topic, she looked around the room or at the floor and/or table.
- JB usually did not initiate her own topics in conversation.

### Language Skills

#### Receptive Language (i.e. understanding of verbal language)

- JB did not consistently respond to questions or directions. The student clinicians often had to repeat the question or give her a verbal cue such as "make sure your eyes are looking at me". These cues helped JB focus her attention on the question and/or direction being given to her.
- When JB responded to questions and directions, she responded appropriately (e.g., student clinician: "Where is your ship going?" JB: "To the sea".)
- JB also noticed if others did not follow directions properly (e.g., student clinician drew a star instead of a happy face JB: "No, a happy face").

#### Expressive Language (i.e. ability to use words to get message across)

- JB demonstrated vocabulary knowledge by labelling a range of objects like "ladybug", "wasp" and "markers".
- Her average sentence length was around 4-5 words (e.g. "I'm keeping these ones" and "I don't need that one"). JB demonstrated age appropriate grammar and sentence complexity.
- JB could successfully and accurately express her emotions (e.g., "I am bored").
- When engaged in conversation, she successfully expressed numerous events and ideas (e.g., her family members, her favorite colour).
- When explaining out of context events (e.g. talking about a t.v. show she likes to watch), JB had difficulty organizing her thoughts and therefore had difficulty conveying her message.

### Reading

- JB demonstrated emergent literacy skills as she knew how to hold a book and how to flip the book pages during assessment activities.
- JB enjoyed looking and talking about pictures in storybooks.

### Voice

- Observational assessment did not reveal any concerns at this time. JB's pitch, volume, and voice quality were judged to be age-appropriate.

### Fluency

- Observational assessment revealed no fluency concerns at this time [no repetitions (eg. "ta-ta-ta-take", prolongations (eg. ssssun), or inappropriate pauses (e.g., ".....dog")].

### Speech Mechanism

- A formal speech mechanism exam was not completed at this time.

- Informal observation revealed that JB has an underbite (i.e., lower teeth overlap with upper teeth).
- Overall, JB's oral structures (e.g. lips, jaw, teeth, tongue) and associated movements (e.g. lifting the tip of the tongue up) appeared supportive for speech.
- The student clinicians will perform an oral speech mechanism exam for the purposes of student learning during this treatment block.

#### Hearing

- Previous hearing screen was done by the 'CHEEP' staff, and concerns with hearing were reported.
- The student clinicians will complete a hearing screening during this treatment block.

### SUMMARY & IMPRESSIONS

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JB, aged 5 years and 7 months, presented as a friendly and active girl who enjoyed reading books and playing active games. JB continues to present with moderate articulation difficulties and a severe functional expressive delay (as previously diagnosed). JB had difficulties saying her s-blends in the middle and at the end of words (e.g., 'wasp', 'desk') and /z/ in all word positions (e.g., 'zebra', 'nose'). When JB was not interested in the conversation, she looked at the floor and/or the table and often did not initiate conversations. JB had an interest in books and enjoyed looking at the pictures. JB's prognosis is good because she has made progress in past therapy; she has improved her articulation of speech sounds since last fall at *Corbett Clinic*.

JB would benefit from support in helping her say words and sentences with s-blends word medially and finally (e.g., 'wasp', 'desk') and words and sentences with /z/ in all word positions (e.g., 'zebra', 'nose'). She would also benefit from instruction on how to slow down her rate during conversations that are exciting and engaging.

### RECOMMENDATIONS

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It is recommended that JB participate in twice weekly treatment sessions in *Corbett Clinic* from September to December 2011 to target:

- Production of her s-blends in both word medial and final word position at word level (e.g., 'wasp') and at sentence level (e.g., 'I sit in my desk to read').
- Production of her /z/ in both word initial and word medial positions in isolation (e.g., "zzzzz"), at word level (e.g., 'dogs'), and at sentence level (e.g., 'I love all types of dogs').
- It is also recommended that JB's expressive language skills be reassessed upon next review in order to document her growth in this area.

Student Speech-Language Pathologist		Student Speech-Language Pathologist	Clinical Educator