



Cincinnati Children's Hospital Medical Center

Division of Speech Language Pathology

## **Language Processing Therapeutic Goals to Improve Active Listening**

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### **Problem Statement 1: Significant deficit in auditory figure-ground.**

**APD LTG 1 (AUDITORY FIGURE GROUND):** To demonstrate improved auditory figure ground skills (extracting a primary message from background noise)

#### **APD STG (AUDITORY FIGURE GROUND):**

- a. To increase the ability to extract a primary message involving (auditory discrimination between minimal pair words, minimal pairs in phrases/sentences, recall of a series of words/phonemes/, following complex linguistic directions) using background white noise from 40% to 80% accuracy.
- b. To increase ability to extract a primary message involving (auditory discrimination between minimal pair words, minimal pairs in phrases/sentences, recall of a series of words/phonemes/, following complex linguistic directions) using background non-lyrical music from 40% to 80% accuracy.
- c. To increase ability to extract a primary message involving (auditory discrimination between minimal pair words, minimal pairs in phrases/sentences, recall of a series of words/phonemes/, following complex linguistic directions) using background lyrical music from 40% to 80% accuracy.
- d. To increase ability to extract a primary message involving (auditory discrimination between minimal pair words, minimal pairs in phrases/sentences, recall of a series of words/phonemes/, following complex linguistic directions) using a background verbal message from 40% to 80% accuracy.

\*These goals can be splintered into specifically what **task** is involved: auditory discrimination between minimal pair words, minimal pairs in phrases/sentences, recall of a series of words/phonemes, or simply following complex linguistic directions. Specify the number of attributes or the grammatical construct (i.e. subordinate clauses) in the directions.

### **Problem Statement 2: Consistent and significant difficulty with auditory memory.**



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Division of Speech Language Pathology

**APD LTG 2(AUDITORY MEMORY):** To improve auditory memory for words and sentences.

**APD STG (AUDITORY MEMORY):**

- a. To increase auditory memory for a 5 or more word-related-string from 40% to 80% accuracy.
- b. To increase auditory memory for a 5 word-unrelated-string from 40% to 80% accuracy.
- c. To increase strategies (chunking, verbal rehearsal, etc) used for functional memory tasks for digits from 40% to 80% accuracy.
- d. To increase strategies used for functional memory tasks for word lists from 40% to 80% accuracy with and without visual cues:
  - i. Strategy of chunking
  - ii. Strategy of verbal rehearsal
  - iii. Strategy of visual imagery
  - iv. Strategy of location
- e. To increase strategies (chunking, verbal rehearsal, etc) used for functional memory tasks for a phoneme series from 40% to 80% accuracy.
- f. To increase strategies used for functional memory tasks for story content from 40% to 80% accuracy of detail recall, with and without visual cues, using the reading strategy of visualization.
- g. To increase recall of complex grammatical sentences with subordinated clauses or conditional commands from 40% to 80% accuracy.
- h. To increase recall of complex grammatical sentences containing 3 attributes (e.g. a large black monster with blue eyes) from 40% to 80% accuracy.
- i. To increase auditory memory of a short story with 3–5 key components by telling details of “who, where, when” with 70% accuracy.
- j. To increase auditory memory of a short story with 3-5 key components by retelling the introduction, main idea and conclusion with 70% accuracy.
- k. To increase auditory memory of a short story with 3-5 key components by verbally giving 3-5 expected details from the story.

**Problem Statement 3: Phonological awareness skills are substantially below expected developmental norms for typically developing school aged children.**



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Division of Speech Language Pathology

**APD LTG 3(PHONOLOGICAL AWARENESS):** To increase phonological awareness skills from a standard score = \_\_\_\_ to age appropriate skills.

**APD STG (PHONOLOGICAL AWARENESS):**

- a. To increase segmentation skills for syllables from 20% to 80% accuracy level.
- b. To increase segmentation skills for phonemes from 20% to 80% accuracy level.
- c. To increase isolation skills for initial, medial and final phonemes from the 50% to 90% level.
- d. To increase deletion skills from the 70% to 90% level for phonemes.
- e. To increase substitution skills of syllables with manipulatives from the 50% to 90% level.
- f. To increase substitution skills of phonemes with manipulatives from the 50% to 90% level.
- g. To increase grapheme knowledge of diphthongs from 25% to 75% upon sight presentations.

**Problem Statement 4:** Consistent and significant difficulty with temporal aspects of audition.

**APD LTG 4 (AUDITION): To demonstrate improved auditory skills.**

**APD STG (AUDITION):**

- a. To increase frequency discrimination by 500 Hz increments as indicated by labeling high vs. low pure tones.
- b. To increase identification of pitch patterns (3 pitch series) within 250 Hz of puretones to 80% accuracy in a trial of 10.
- c. To increase identification of pitch patterns of modulated pitch sweeps (i.e. Away We Go CD) to 80% accuracy in a trial of 10.
- d. To increase gap detection (silence between pure tone bursts or white noise) from 40% to 80% accuracy (i.e. keyboard App)

**Problem Statement 5:** Significant deficit in understanding prosody cues.

**APD LTG 5 (PROSODY): To increase comprehension and interpretation of metalinguistic cues such as prosody and inflection in reading tasks and conversation.**



Cincinnati Children's Hospital Medical Center

Division of Speech Language Pathology

**APD STG (PROSODY):**

- a. To increase comprehension of prosody meaning for emphasized KEY words (through increased intensity **or** prolongation) in a reading task or conversation from 40% to 80% accuracy.
- b. To increase comprehension of inflectional cues (by raised or lower pitches) within a reading passage or conversation as they relate to questions, statements or sarcasm from 40% to 80% accuracy.
- c. To increase gap detection (silence between pure tone bursts) and it's metalinguistic meanings while reading aloud from 40% to 80% accuracy.
- d. To increase application of grammatical markers placed into a text passage devoid of any commas, question marks, or exclamation points, based on child's gap or pitch detection (pitch dropping followed by silence = comma or period placement, while pitch raised = questions mark placement) and it's metalinguistic meanings while hearing a passage being read: from 40% to 80% accuracy.
- e. To increase verbal application of pitch and silence corresponding to grammatical markers, while child reads a passage aloud.
- f. To increase verbal application of KEY words (through increased intensity of prolongation) corresponding to grammatical markers, while child reads a passage aloud.
- g. To increase identification & application of silence or pitch cues (i.e. gap or pitch detection) and it's metalinguistic meanings during conversation from 40% to 80% accuracy

**Problem Statement 6:** Receptive and/or expressive language deficits are substantially below expected and developmental norms for typically developing school-aged children.

**APD LTG 6a (FIGURATIVE LANGUAGE): To increase comprehension and usage of figurative language.**

**APD STG (FIGURATIVE LANGUAGE):**

- i. To increase comprehension of figurative language phrases ("Play it by ear") from 50% to 75% accuracy as evidenced by matching to a semantically similar meaning.
- ii. To increase expression of figurative language phrases by filling in the blank in sentences to 80% accuracy.
- iii. To increase expression using figurative language phrases in a short paragraph appropriately 80% of the time.



Cincinnati Children's Hospital Medical Center

Division of Speech Language Pathology

**APD LTG 6b (RECEPTIVE LANGUAGE): To increase receptive vocabulary and semantic closure skills.**

**APD STG (RECEPTIVE LANGUAGE):**

- i. To increase identification of semantic categories of a series of 4-5 related words with 70% accuracy.
- ii. To identify the one "outlier" of a group of 4-5 related words with 70% accuracy.
- iii. To identify 2-3 synonyms for key vocabulary words within a text with 70% accuracy.
- iv. To identify a noun or verb when given "clues" from the Expanding Expression Tool (EET).
- v. To provide "clues" based on the EET criteria in order to allow listener to guess the vocabulary word described.
- vi. To demonstrate inferencing skills from text

**Problem Statement 7:** Consistent and significant difficulty with binaural integration and/or separation.

**APD LTG 7 (BINAURAL INTEGRATION): To increase binaural integration skills.**

**APD STG (BINAURAL INTEGRATION):**

- a. To increase ability to name objects out of sight by touch of the left hand with 70% accuracy.
- b. To increase ability to describe attributes of objects out of sight by touch of the left hand with 70% accuracy.
- c. To increase ability to describe drawings of limited complexity as they relate to a story heard auditorily using 2-3 details.