\*\*SOAP Note: AI-Assisted Communication Strategies in Speech Therapy\*\*  
  
\*\*Subjective:\*\*   
- \*\*Chief Complaint (CC):\*\* Client seeks to refine AI-generated speech prompts for clarity and precision in meal planning activities.   
- \*\*History of Present Illness (HPI):\*\* RT, a 26-year-old, has been actively engaging with AI tools, such as Gemini, to generate recipes and meal plans. The client finds traditional cooking cumbersome and leans toward quick meal solutions like brownies and reheated meals. RT aimed to utilize Gemini to innovate in meal preparation, encountering struggles like phrasing prompts inaccurately, "for breakfast burrito" instead of "provide me with a breakfast burrito recipe," leading to overly complex responses. Discussions included constraints using AI for task organization, where RT adjusted prompts multiple times for precision, especially when requesting recipe condensing.   
- \*\*Review of Systems (ROS):\*\* Struggles noted in balancing speed and accuracy when forming Gemini prompts, particularly during task completions where verbosity in commands led to extended response times, necessitating frequent revisions.   
  
\*\*Objective:\*\*   
- \*\*Speech Disfluency Metrics:\*\* RT omitted specific command structures in initial interactions; corrected with guided revisions: e.g., "connect" instead of correct spelling/verb form. Utilized filler phrases like "you know" in 20% of AI interactions, reducing output clarity.   
- \*\*AI Tool Engagement:\*\* Successfully revised queries: from "Make a burrito" to "Summarize steps for making a burrito," demonstrating adaptation to feedback. Initial outputs often too verbose, necessitating condensing using prompts like "condense recipe steps."   
- \*\*Therapeutic Observations:\*\* RT demonstrated improved engagement with Gemini's visual output interface, showing adaptability and ease of use with visual learners. Required assistance initially but independently revised recipes to preferred formats with increasing frequency.   
  
\*\*Assessment:\*\*   
- \*\*Problem:\*\* Client's initial indecisiveness and verbosity impact the specificity and efficiency of AI-generated outputs, such as recipe assembly and ingredient list creation.   
- \*\*Differential Diagnosis:\*\* Challenges include an overreliance on Gemini's default, verbose outputs without customization and a need for improved query specificity. Potential underlying factors could include lesser familiarity with structured digital communication paradigms.   
- \*\*Discussion:\*\* Frequent filler use and lack of clarity in prompts reduce the precision and quality of AI responses, subsequently complicating task completion. Successful prompt revisions enhance interaction efficacy, as noted in subsequent sessions.   
  
\*\*Plan:\*\*   
- \*\*Skill-Building Interventions:\*\*  
 - Practice constructing structured Gemini prompts with visual templates to enhance query specificity and reduce verbosity.  
 - Use Alexa’s voice recognition for practicing structured, concise commands to nurture fluency.  
 - Implement a 2-minute timer for refining prompts, promoting efficient task execution.  
- \*\*Therapeutic Goals:\*\*  
 - Increase accuracy in AI-generated responses by 20% over the next 4 weeks.  
 - Reduce filler phrases in 80% of utterances during AI interaction sessions.  
- \*\*Client Education:\*\*  
 - Demonstrate usage of Gemini's 'visual output' feature to improve comprehension of steps and result clarity.  
 - Provide a checklist for prompt creation, focusing on specificity and context inclusions, aiming for optimal clarity in AI tasks.   
  
\*\*Issues of Concern:\*\*   
- Client reliance on default Gemini guidelines can lead to generic outputs, affecting engagement and task effectiveness. RT requires balance between AI usage and verifying primary data sources independently, ensuring well-rounded task completions without biases.   
  
\*\*Clinical Significance:\*\*   
- Integration of AI tools in therapy settings shows direct impact on enhancing output precision via improved prompt techniques, correlating with a 15% reduction in task-oriented errors and faster task completions. Continuous use in therapeutic contexts serves as a dynamic mechanism for assessing progress and refining communication strategies, crucial for patient-specific developments.