Creating Simulations for Hearing Competencies for SLP Students

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Session Objectives
1. Design HL simulation for graduate students.
2. Understand the challenges involved in creating HL simulations.
3. Create scenarios for HL simulations.

Competencies

Evaluation skills for

1. Conducts screening and prevention procedures (std IV-D, std V-B, 1a)
2. Collects case history information and integrates information from clients/patients and/or relevant others (std V-B, 1b)
3. Selects appropriate evaluation instruments/procedures (std V-B, 1c)
4. Administers standardized diagnostic tests correctly (std V-B, 1c)
5. Scores diagnostic tests correctly (std V-B, 1c)
6. Uses appropriate stimuli and activities for elicitation of non-standardized assessment tasks (language/fluency samples, spontaneous speech samples, oral motor evaluation, etc) (std V-B, 1c)
7. Adapts evaluation procedures to meet patient needs (std V-B, 1d)
8. Possesses knowledge of etiologies and characteristics for each communication and swallowing disorder (std IV-C)
9. Summarizes and reports relevant background information
10. Interprets information from test results, history, and behavioral observations and reports appropriately. Formulates diagnosis from test results
11. Makes appropriate recommendations for intervention (std V-B, 1e)
12. Completes administrative functions and documentation necessary to support evaluation (std V-B, 1f)
13. Makes appropriate recommendations for patient referrals (std V-B, 1g) ?
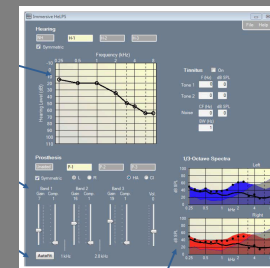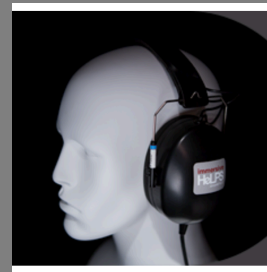
Treatment skills for

1. Develops setting-appropriate intervention plans with measurable and achievable goals. Collaborates with clients/patients and relevant others in the planning process (std V-B, 2a, std 3.1.1B)
2. Develops treatment plans with measurable, effective, and achievable goals, including long term goals, short term goals and session objectives to support treatment plan (std V-B, 2a, std 3.1.1B)
3. Implements treatment plans (std V-B, 2b, std 3.1.1B)
4. Selects and uses appropriate materials/instrumentation (std V-B, 2c)
5. Measures and evaluates client's/patient's performance and progress on an ongoing basis (std V-B, 2d)
6. Uses baseline and ongoing data collection to appropriately modify treatment objectives (std V-B, 2e)
7. Demonstrates clinical flexibility. Able to adapt treatment sessions to meet client needs (std V-B, 2e)
8. Completes administrative functions and documentation necessary to support treatment (std V-B, 2f)
9. Identifies and refers patients for services as appropriate (std V-B, 2g) ?
10. Sequences and paces activities within the treatment session to facilitate client success (std V-B, 2e)

Technology

IMMERSIVE HELPS
Realtime Hearing Loss and Prosthesis Simulator

Designed for advanced research and clinical applications, I-HeLPS is a wearable headset that implements hearing loss and aid simulations using the ambient acoustic environment as input.

https://www.sens.com/products/i-helps/#features

Materials

https://professionals.cid.edu/product/cid-spice-2nd-edition/

Student Feedback

"I used to think [they] could learn everything quickly and easily – if they just focused. Now, after being the client, I realize that no amount of focus would magically have made me understand."

"[T]his was the first time I ever had the opportunity to dig in and apply aural rehab/habilitiation [...] I learned to critically think about the differences between hearing and language [...] This was an extremely valuable and mind-blowing sim for me overall."

[As the client with hearing loss,] "I found that [...] I didn't make a comment or ask a question because it was so hard to hear" and "I felt obsolete, as if I was not useful anymore."

"I loved the experience and our discussions about it. I think everyone should be required to complete this sim."

"I gained much greater empathy."

"This simulation taught me how important it is to target sound discrimination prior to learning language."