

San José State University, Lurie College of Education
Department of Communicative Disorders & Sciences (CDS)
EDSP 251 Seminar in Phonological Disorders (1 & 2) (3 units); Fall, 2019

Instructor: Paul W. Cascella
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Office Hours: Drop in: Thursday, 11:00am to 12:00pm; Friday 7:30-8:30am
Appointments: As scheduled
Class Days/Times: (1) Friday, 8:30 to 11:15am; (2) Friday, 12:30 to 3:15pm
Classroom: (1) Sweeney Hall 448; (2) Sweeney Hall 449

Course Description: Establishes a level of advanced competency in the knowledge and understanding of phonology and phonological disorders: analysis procedures, assessment, and intervention strategies as a logical consequence of diagnostic findings.

Course Learning Outcomes (CLOs)

1. Students will describe the core constructs of speech sound disorders, i.e., anatomy and physiology; articulatory phonetics; motor, cognitive and psychosocial factors; dialectical variations; and the dynamics of speech production (i.e., coarticulation);
2. Students will describe theories about speech sound development and disorders;
3. Students will critically compare (a)typical and diverse cross-linguistic phonological development;
4. Students will outline and critically evaluate assessment formats and strategies, including (non)standardized tests of speech sounds and phonological awareness;
5. Students will outline and critically evaluate speech sound interventions;
6. Students will critically evaluate contemporary speech sound apps;
7. Students will critically evaluate contemporary research in speech sound disorders and describe research applications to clinical practice;
8. Students will identify how knowledge of speech sounds disorders could serve them later in their professional speech-language pathology careers.
9. Students will describe a client's perspective regarding the impact of a speech sound disorder on the person's sense-of self, employment, and interpersonal relationships.

Links between EDSP 251 CLOs and the CDS Graduate [Program Learning Outcomes](#) (PLOs)

- CLOs 1, 2, 3, & 4 are linked to PLO 1 [foundational knowledge of speech-language...];
- CLOs 5, 7, 8, & 9 are linked to PLO 2 [clinical competence...];
- CLOs 5, 6, & 9 are linked to PLO 3 [collaborative, inter-professional family ... services];
- CLOs 7 & 8 are linked to PLO 4 [evidence-based practices];
- CLOs 5, 6, 8, & 9 are linked to PLO 5 [professionalism, ethical actions, and advocacy];
- CLOs 1, 2, 3, 4, 5, 6, & 7 are linked to PLO 6 [skills in oral and written ... communication].

Links between EDSP 251 CLOs and the [2020 Certificate of Clinical Competence Standards](#)

- CLOs 1, 2, & 3 are linked to Standard IV-C [communication ... disorders and differences, ... etiologies, characteristics, and anatomical/physiological, acoustic, psychological, developmental, and linguistic and cultural correlates in ... speech sound production; articulation; motor planning and execution; phonology; accent modification; reading; ... orofacial myology];
- CLOs 1, 3, 4, 5, 6, 8, & 9 are linked to Standard IV-D [principles and methods of prevention, assessment, and intervention for persons with communication ... disorders, including ... anatomical/physiological, psychological, developmental, and linguistic and cultural correlates];
- CLO 7 is linked to Standard IV-F [processes used in research and of the integration of research principles into evidence-based clinical practice];
- CLOs 6, 7, & 8 are linked to Standard IV-G [contemporary professional issues];
- CLOs 1, 2, 3 4, 5, 6, & 7 are linked to Standard V-A [oral and written ...communication].

Required Textbook

[Articulation & Phonology in Speech Sound Disorders: A Clinical Focus](#) (2020)

By Jacqueline Bauman-Waengler

Published by Pearson, New York

ISBN: 9780134990576

Cost: Digital \$29.99 to 39.99; Digital plus Print \$139.32; Print-only \$132.99

Required App: Per assignment 3, students will purchase a contemporary app (\leq \$20).

Final Exam: Per assignment 5, students might incur a cost for developing clinical materials.

ASHA Observation Hours: Students who need additional ASHA observation hours can utilize class activities (guided instruction) by tracking the hours via the [CDS Summary of Observation Hours Form](#).

Required Contemporary Research Readings (available via Canvas)

Barton-Hulsey, A., Sevcik, R.A., & Ronski, M. (2018). The Relationship between speech, language, and phonological awareness in preschool-age children with developmental disabilities. *American Journal of Speech-Language Pathology*, 27, 616-632.

Evans, K.E., Munson, B., & Edwards, J. (2018). Does speaker race affect the assessment of children's speech accuracy? A Comparison of speech-language pathologists and clinically untrained listeners. *Language, Speech, and Hearing Services in Schools*, 49, 906-921.

Farquharson, K., & Boldini, L. (2018). Variability in interpreting "educational performance" for children with speech sound disorders. *Language, Speech, and Hearing Services in Schools*, 49, 938-949.

- McLeod, S., & Crowe, K. (2018). Children's consonant acquisition in 27 languages: A Cross-linguistic review. *American Journal of Speech-Language Pathology*, 27, 1546-1571.
- Mok, P.P.K., Fung, H.S.H., & Li, V.G. (2019). Assessing the link between perception and production in Cantonese tone acquisition. *Journal of Speech-Language-Hearing Research*, 1-15.
- Potter, N.L., Nievergelt, Y., & VanDam, M. (2019). Tongue strength in children with and without speech sound disorders. *American Journal of Speech-Language Pathology*, 27, 1-11.
- Preston, J.L., Holliman-Lopez, G., & Leece, M.C. (2018). Do participants report any undesired effects in ultrasound speech therapy. *American Journal of Speech-Language Pathology*, 27, 813-818.
- Terband, H., Spruit, M., & Maassen, B. (2018). Speech impairment in boys with fetal alcohol spectrum disorders. *American Journal of Speech-Language Pathology*, 27, 1405-1425.

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 Please note: Suzie's email signature block includes an appointment calendar.

Course Requirements and Assignments

1. Self-Directed Learning and In-Class Teaching Opportunity (20%)

- a) This assignment emphasizes CLOs 1, 2, & 7 and PLOs 1, 2, & 4.
- b) Students can complete this assignment individually, or in 2 to 4-person groups (assigned a single grade).
- c) Task: While writing definitions for the weekly key vocabulary words (see appendix 1a), students will enact a 4-step Mindful Learning process. Students will bring 2 copies of their written answers to class, 1 for the instructor and 1 for group discussion.
- d) Grading: Students will submit one copy of the weekly answers to the instructor. Full credit will be assigned for completing the task and no credit for not completing the task. The lowest graded assignment will be dropped from the total tally. At the end of the in-class teaching opportunity, weekly instructors will complete a self-rating on their oral communication skills (appendix 1b).
- e) Schedule: The course calendar identifies this assignment's due dates.

4-Step Process

- A. Pre-Reading Estimate (with Verbal Rehearsal): Before reading the chapter, review the list of each week's key concepts and identify the ones you can already verbally describe. Practice saying the definitions aloud (in your own words) to yourself or a study partner while writing your answers. Then, mark the ones (via **yellow highlighter**) in which you feel knowledgeable.

- B. Read and Re-Assess (with Verbal Rehearsal & Comprehension Monitoring): While reading the chapter, confirm and fine-tune your verbal descriptions of the key concepts identified in step #1 by saying these aloud in your own words to yourself or a study partner again as you are editing the written definitions. If you confirmed your prior knowledge, add a half blue line to the prior yellow (i.e., half yellow and half blue). If you realized you don't really understand the concept, highlight the key term in half yellow and half green.
- C. Read, Self-Teach, Assess (with Verbal Rehearsal & Comprehension Monitoring): Teach yourself the new key concepts that are not previously highlighted. Practice saying these aloud in your own words to yourself or a study partner as you are writing the definitions. Then, with a blue highlighter, identify the key concepts you can now additionally verbally describe. With a green highlighter, identify the key concepts you cannot verbally describe.
- D. Teach Others (with Verbal Rehearsal and Comprehension Monitoring): At the beginning of class, small groups of students will lead the discussion about the weekly study questions while being paired with the instructor. Students will clarify key terms, provide examples (as necessary), be respectful to others' ideas, and address inquiries from their peers.

2. Contemporary Research Readings (20%)

- a) This assignment emphasizes CLOs 1, 3, 5, 7, 8, & 9 and PLOs 1, 2, 3, 4, 5, & 6.
- b) Students can complete this assignment individually, or in 2- to 4-person groups (assigned a single grade).
- c) Task: Students will read, discuss, and critique 8 recently published research articles about speech sound disorders. For 1 (one) of the articles, students will submit a written critique (4 to 6 pages; APA format) due one week after the class discussion. Critiques will focus on the study questions included in the slide packet (listed below).
- d) Grading: Grading rubrics are included in appendices 2a and 2b.
- e) Schedule: The following calendar identifies the dates for the class discussions and when the written paper is due.
- f) Please note: students should report the Flesch-Kincaid Grade Level Test statistics and the percent of passive sentences via [Microsoft Office](#).

Farquharsan et al.:	Class Discussion (8/30/19); Critique Due (9/6/19); Slide 19
Potter et al.:	Class Discussion (9/6/19); Critique Due (9/13/19); Slides 24-25
McLeod & Crowe:	Class Discussion (9/13/19); Critique Due (9/20/19); Slide 39
Barton-Halsey et al.:	Class Discussion (9/20/19); Critique Due (9/27/19); Slide 50
Mok et al.:	Class Discussion (10/4/19); Critique Due (10/11/19); Slide 63
Evans et al.:	Class Discussion (10/18/19); Critique Due (10/25/19); Slide 80
Terbrand et al.:	Class Discussion (11/1/19); Critique Due (11/8/19); Slide 115
Preston et al.	Class Discussion (11/15/19); Critique Due (11/22/19); Slide 131

3. Critical Analysis of Speech Sound Disorders Apps (20%)

- a) This assignment emphasizes CLOs 5, 6, 8, & 9 and PLOs 2, 4, & 6
- b) Students can complete this assignment individually, or in 2 to 4-person groups (assigned a single grade).
- c) Task: Students will critically assess the efficacy of 1 or 2 contemporary Apps related to speech sound disorders and highlight their salient findings in a 15-minute oral presentation and a single page handout (both sides). In their analysis, students will describe and express opinions (supported with concrete examples) on the App's elements per the topics identified in appendix 3a.
- d) Grading: A grading rubric is included in appendix 3b.
- e) Schedule: The oral presentation and written handout are due on 10/25/19.

4. Self-Reflection on Clinical Assessment Skills in Speech Sound Disorders (20%)

- a) This assignment emphasizes CLOs 4, 8, & 9 and PLOs 2, 3, & 6
- b) Students can complete this assignment in 2- to 4-person groups (assigned a single grade).
- c) Task: Students will plan and conduct assessment tasks (non-standardized speech sampling [B-W pp. 174-176]; standardized articulation or phonological test; phonological awareness test; speech motor function testing [B-W. appendix 6.1]; feeding screening; hearing screening) with a person **without** a known communication disorder. As applicable, students will include a standardized language test. Appendix 4a identifies standardized test batteries available from the instructor. In a written paper (5 to 7 pages, APA format), students will reflect on their experience using the key topics listed in appendix 4b.
- d) Grading: Students will be graded on the depth of responses to the items listed in appendix 4b.
- e) Schedule: The self-reflection written paper is due by 11/8/19.

5. Phonological Treatment Activity/Materials Share (Final Exam) (20%)

- a) This assignment emphasizes CLOs 5, 8, & 9 and PLOs 2, 4, & 6.
- b) Students can complete this assignment individually, or in 2- to 4-person groups (assigned a single grade). Students are encouraged to review the relevant chapter in Bauman-Waengler & Garcia's book [*Phonological Treatment of Speech Sound Disorders in Children: A Practical Guide*](#) (2019) available, on reserve, at the King Library.
- c) Task: Students will develop and demonstrate treatment materials and an activity that showcases a phonological process intervention approach (B-W pp. 343-383). In a 12-minute oral presentation, students will describe the approach, provide a concrete example of a treatment activity, and offer opinions about the utility of the materials and activity. Students will select one of the following:
 - a. Minimal pair contrast therapy
 - b. Minimal opposition contrast therapy
 - c. Multiple oppositions approach
 - d. Maximal oppositions approach

- e. Complexity approach
- f. Cycles
- g. Core vocabulary approach
- h. Metaphon therapy
- d) Grading: Appendix 5 provides a self-, peer-, and instructor grading rubric.
- e) Schedule: As per the university's calendar:
 - a. Section 1: Friday, 12/13/19, 7:15am to 9:30am
 - b. Section 2: Wednesday, 12/11/19, 12:15 to 2:30pm

Additional Grading Information: Late work will be assigned a zero (0) grade. *Late* is defined as any assignment not given to the instructor at the beginning of the class period when it is due. Extra credit opportunities will not be available. Final course grades will be assigned as:

A+ = 97.5 to 100%	A = 93.5 to 97.4%	A- = 89.5 to 93.4%	
B+ = 87.5 to 89.4%	B = 83.5 to 87.4%	B- = 79.5 to 83.4%	
C+ = 77.5 to 79.4%	C = 73.5 to 77.4%	C- = 69.5 to 73.4%	
D+ = 67.5 to 69.4%	D = 63.5 to 67.4%	D- = 59.5 to 63.4%	F = <59.5%

Classroom and University Policies: Students will be expected to actively participate and engage in weekly class discussions and conduct themselves in an ethical, collegial, and professional manner. Student attendance is expected at every class. As a professional courtesy, the instructor should be notified of anticipated absences. The following SJSU policies apply to EDSP 251:

[General Expectations, Rights and Responsibilities of the Student](#)
[Workload and Credit Hour Requirements](#)
[Attendance and Participation](#)
[Timely Feedback on Class Assignments](#)
[Accommodation to Students' Religious Holidays](#)
[Dropping and Adding](#)
[Consent for Recording of Class and Public Sharing of Instructor Material](#)
[Academic Integrity](#)
[Campus Policy in Compliance with the Americans with Disabilities Act](#)
[Student Technology Resources](#)
[SJSU Peer Connections](#)
[SJSU Writing Center](#)
[SJSU Counseling and Psychological Services](#)

Anticipated Week-by-Week Calendar

1st Class, Friday, 8/23/19

Topics: Syllabus Review; Initial Key Concepts and Prior Knowledge; Observation Format; Initial Case Examples

2nd Class, Friday, 8/30/19

Topics: Case Examples; Classification Systems; Phonology Constructs; Eligibility Criteria
 Research Reading: Farquharsan et al. Group Discussion
 Study Questions Due: B-W Chapter 1, The Clinical Framework

3rd class, Friday, 9/6/19

Topics: Case Examples; The Speech Motor System; Vowels & Consonants; Dynamics of Speech Production

Research Reading: Potter et al. Group Discussion

Study Questions Due: B-W Chapters 2 & 3, Articulatory Phonetics; Transcription and Diacritics

Assignment Due: Farquharsan et al. Paper

4th Class, Friday, 9/13/19

Topics: Phonological Theories; Speech Sound Development

Research Reading: McLeod & Crowe Group Discussion

Study Questions Due: B-W Chapter 4, Theoretical Considerations

Assignment Due: Potter et al. Paper

5th class, Friday, 9/20/19

Topics: Sound Development (cont'd); Phonological Awareness; Reading and Writing Disorders

Research Reading: Barton-Halsey et al. Group Discussion

Study Questions Due: B-W chapter 5, Phonological Development

Assignment Due: McLeod & Crowe Paper

6th class, Friday, 9/27/19

No Class Meeting; Small Group Assessment Discussion or Experience

Assignment Due: Barton-Halsey et al. Paper (via e-mail)

7th class, Friday, 10/4/19

Topics: Case Examples; Assessment; Phonological Processes; Suppression; Risk Factors

Research Reading: Mok et al. Group Discussion

Study Questions Due: B-W Chapter 6, Assessment & Appraisal

8th class, Friday, 10/11/19

Topics: Case Examples; Classification Systems; Assessment within a Diversity Framework; Dialectical Variations

Assignment Due: Mok et al. Paper

Study Questions Due: B-W Chapter 7, Diagnosis

9th class, Friday, 10/18/19

Topics: Assessment (cont'd); Developmental Norms; Speech Screening; Popular Standardized Tests; Evaluation of Test Batteries; Stimulability; Speech Sample Analysis; Intelligibility; Oral Structural-Functional Examination; Feeding Screening

Research Reading: Evans et al. Group Discussion

Study Questions Due: B-W Chapter 8, Dialects and English as a Second Language

10th class, Friday, 10/25/19

Topic/Assignment Due: Apps Presentations

Assignment Due: Evans et al. Paper

11th class, Friday, 11/1/19

Topics: Treatment Approaches; Articulation; Related Factors; Intervention Sequence; Motor Learning Principles; Oral Motor Outcomes

Research Reading: Terband et al. Group Discussion

Study Questions Due: B-W Chapter 9, Therapy for Articulation Disorders

12th class, Friday, 11/8/19

Topics: Articulation Treatment Approaches (cont'd)

Assignment Due: Terband et al. Paper

Assignment Due: Assessment Self-Reflection

13th class, Friday, 11/15/19

Topics: Phonological Treatment Approaches; Cycles; Minimal Pairs

Research Reading: Preston et al. Group Discussion

Study Questions Due: B-W Chapter 10, Treatment for Phonological Disorders

14th class, Friday, 11/22/19

Topics: Phonological Treatment Approaches (cont'd)

Assignment Due: Preston et al. Paper

15th Week; No class, Friday, 11/29/19

Thanksgiving Holiday

15th class, Friday, 12/6/19

Topics: Childhood Apraxia of Speech; Special Populations

Study Questions Due: B-W Chapter 11: Speech Sound Disorders in Selected Populations

Friday, 12/6/19

Lurie College Learning Showcase

An opportunity for students from across Lurie College programs to showcase their work for one another and the larger community, including for example, research activities, capstone projects, learning portfolios, and end-of-course projects.

Final Exam: Phonological Activity/Materials Share

Section 1: Friday, December 13, 2019, 7:15am to 9:30am

Section 2: Wednesday, December 11, 2019, 12:15 to 2:30pm

Appendix 1a. Key Concepts from Bauman-Waengler (2020)

Chapter 1: Clinical Framework

1. Communication v. speech v. language
2. Phonology
3. Morphology
4. Syntax
5. Semantics
6. Pragmatics
7. Communication disorder v. speech disorder v. language disorder
8. Hearing disorder v. central auditory processing disorder
9. Articulation
10. Speech sounds (phonetic variations)
11. Phoneme
12. Allophone
13. Phonotactics
14. Minimal pair
15. Speech sound disorder v. articulation disorder v. phonological disorder
16. Phonemic inventory
17. Mark subtypes and etiological factors (pp. 10-11) for future reference
18. Mark figure 1.5 for future reference
19. Mark table 1.2 for future reference for definitions

Chapter 2: Articulatory Phonetics

1. Phonetics v. articulatory phonetics v. acoustic phonetics v. auditory phonetics
2. Briefly highlight the core elements of subsystems impacting speech production (pp. 19-27)
3. Mark table 2.1 for future reference
4. Characteristics of vowels v. characteristics of consonants
5. Mark table 2.2 for future assistance with transcription
6. Review the vowel information and the manner/place/voicing information on pages 29 to 38, then identify why it is important to classify consonants this way?
7. Coarticulation v. assimilation
8. Contact v. remote assimilation
9. Progressive v. regressive assimilation
10. Mark table 2.6 for future reference
11. Why does the B-W want us to practice syllabication?
12. Parts of a syllable: onset, peak, coda
13. Open v. closed syllable

Chapter 3: Phonetic Transcription and Diacritics

1. Broad v. narrow transcription

2. Diacritics
3. Mark figure 3.1 for future assistance for diacritical markers
4. Mark pp. 53 to 66 for future assistance with diacritical markers

Chapter 4: Theoretical Considerations and Practical Applications

1. Phonetic level v. phonemic level
2. Linguistic function (i.e., form v. function of sounds)
3. Why is it helpful to have a distinctive features classification system?
4. Note table 4.1 for future reference for distinctive features
5. Generative phonology
6. Surface v. underlying levels of representation
7. Naturalness v. markedness
8. Natural phonology
9. Do you agree that phonological processes are innate, universal, and continuously revised? Why?
10. Suppression
11. Syllable structure process
12. Substitution process
13. Assimilation process
14. Phonological process analysis
15. Linear v. nonlinear phonology
16. Tiered representation of features
17. Mark the definitions of nonlinear phonologies for future reference (pp. 93 to 110)

Chapter 5: Normal Phonological Development

1. Prelinguistic v. linguistic behavior
2. What are some of the critical structural and functional developmental processes that occur from birth to age 1? After first words?
3. Summarize three major findings regarding perceptual development among very young children
4. Describe the evidence that suggests infant babbling is not random
5. Reflexive crying/vocalizations
6. Cooing/gooing
7. Vocal play
8. Canonical babbling
9. Reduplicated babbling
10. Nonreduplicated or variegated babbling
11. Jargon
12. Vocoid v. contoid
13. Syllable shapes
14. Prosodic features
15. When do infants begin using prosodic features?
16. First fifty-word stage

17. Invented words
18. Holophrastic period
19. Phonetic variability
20. Identify the main phonological characteristics of first words (pp. 127-129)
21. Salience factor
22. Avoidance factor
23. Prosodic variation
24. Summarize phonology growth that occurs among preschool-aged children
25. Identify the suppression ages of the processes listed on pp. 139-143
26. Summarize phonology growth among school-aged children
27. Consonant cluster development
28. Morphophonology
29. Prosodic feature development
30. Metaphonology
31. Phonological processing
32. Phonological awareness
33. Phonemic awareness
34. Phonological memory
35. Retrieving phonological information
36. Syllable awareness
37. Onset-rime awareness

Chapter 6: Assessment and Appraisal

1. Contrast appraisal v. diagnosis
2. Screening v. comprehensive evaluation
3. Why is it important to consider the WHO definitions?
4. What should be included in a hearing screening?
5. What should be included in a speech mechanism screening?
6. Macro/micrognathia,
7. Nares, nasal septum, philtrum, columella
8. Silent breathing, clavicular breathing
9. Normal (Class I) occlusion, Class II & III malocclusions, axial orientation
10. Macro/macroglossia
11. Fissures, fasciculations, fistula, bifid uvula
12. Why look for a blue tint on the midline of the hard/soft palate?
13. Why do we analyze structure and function?
14. What is your opinion of diadochokinetic rates?
15. Mark table 6.1 for future reference
16. Advantages and disadvantages of standardized speech assessments
17. Factors to consider in selecting a standardized speech measure
18. Mark table 6.2 for future reference
19. How might you supplement articulation tests during a diagnostic evaluation?
20. Two-way scoring v. five-way scoring
21. Stimulability testing

22. Why are stimulability-testing results questionable in their clinical application?
23. Contextual testing
24. Why is it important to collect a spontaneous speech sample?
25. Mark tables 6.5 and 6.6 for future reference
26. Why does B-W recommend cognitive appraisal?
27. Why does B-W recommend assessment of communicative participation?
28. Emerging phonology

Chapter 7: Diagnosis

1. Inventory of speech sounds
2. Distribution of speech sounds
3. Mark figure 7.1 for future reference
4. What is your opinion of the matrix in figure 7.2?
5. Why is it important to formulate a preliminary error analysis (pp. 203-204)?
6. Why is a phonemic inventory important?
7. Why conduct an analysis of phonemic contrasts?
8. Why is it important to consider vowel errors?
9. Carefully read and note B-W's classification notes (pp. 211-218)
10. What is your opinion of the intelligibility factors (pp. 218-219)?

Chapter 8: Dialects and English as a Second Language

1. Dialect
2. Formal standard English v. informal standard English
3. Vernacular dialect
4. Regional dialect
5. Social dialect
6. Ethnic dialect
7. Mark tables 8.1, 8.2, and 8.3 for future reference
8. Race
9. Culture
10. Ethnicity
11. Transfer
12. African American Vernacular Dialect
13. Mark table 8.4 for future reference
14. What is ASHA's position on dialects?
15. Factors in phonological development of children learning ESL
16. Limited English proficient
17. Why is it important to consider the prosodic elements on other languages?
18. For future reference, note the characteristics of:
 - a. Spanish American English
 - b. Vietnamese American English
 - c. Korean American English
 - d. Cantonese American English

- e. Filipino/Tagalog American English
 - f. Hmong American English
 - g. Arabic American English
19. Cultural competence

Chapter 9: Therapy for Articulation Disorders

1. Phonetic approach v. multiple-sound approach
2. Who are candidates for the phonetic approach?
3. Why is phonetic context useful (pp. 269-270)?
4. Describe the therapy progression in a phonetic approach. Highlight the major stages and tasks (pp. 272 to 281)
5. What is your opinion of the motor learning principles and their application to articulation therapy? (pp. 281-285)
6. The author extensively discusses misarticulations of specific speech sounds (pp. 286 to 334). Be sure to mark this section for future reference in treatment planning.

Chapter 10: Treatment of Phonological Disorders

1. Describe Fey's (p. 343) common principles of treating phonemic errors
2. Pages 344 to 383 describe myriad phonologically-based treatment approaches. As you read the material mark for future assistance: 1) each approach's purpose, and 2) for whom the therapy is recommended.
 - a. Minimal pair contrast therapy
 - b. Minimal opposition contrast therapy
 - c. Multiple oppositions approach
 - d. Maximal oppositions approach
 - e. Complexity approach
 - f. Cycles
 - g. Core vocabulary approach
 - h. Metaphon therapy
 - i. Children with emerging phonology and language
3. How might you intervene for a child with vowel errors and limited vowel production?

Chapter 11: Speech Sound Disorders in Selected Populations

1. Mark for future reference the 1) characteristics, 2) Dx considerations, and 3) Rx considerations for: Childhood Apraxia of Speech, Cerebral Palsy, Cleft Palate, Intellectual Disability, Hearing Impairment, (Adult) Acquired Apraxia of Speech and Dysarthria

Appendix 1b: Self-Directed Learning and In-Class Teaching Opportunity Articles
Grading Rubric (Self-Evaluation)

Student Instructor(s):

Was knowledgeable about the subject matter	Always	Mostly	Sometimes	Rarely	Not Applicable
Provided helpful examples to illustrate a main point	Always	Mostly	Sometimes	Rarely	Not Applicable
Explained concepts using both professional and de-jargonized terms	Always	Mostly	Sometimes	Rarely	Not Applicable
After answering a question, confirmed that the answer was helpful	Always	Mostly	Sometimes	Rarely	Not Applicable
Listened carefully to students' conceptions of the answer	Always	Mostly	Sometimes	Rarely	Not Applicable
Answered questions concisely	Always	Mostly	Sometimes	Rarely	Not Applicable
Used appropriate body language (e.g., eye contact, gestures, body posture)	Always	Mostly	Sometimes	Rarely	Not Applicable
Spoke at an appropriate speech rate	Always	Mostly	Sometimes	Rarely	Not Applicable

Comments

Appendix 2a

Contemporary Research Articles: Written Communication Rubric I

Content: Addresses the content of the study questions per slides (as-applicable) 19, 24-25, 39, 50, 63, 80, 115, 131	Mostly	Sometimes	Rarely
Writing Conventions			
Complete sentences	Mostly	Sometimes	Rarely
Correct word (vocabulary) usage	Mostly	Sometimes	Rarely
Correct paragraph formatting and topic sentences	Mostly	Sometimes	Rarely
Active voice (reported percent of passive sentences) Y N	Mostly	Sometimes	Rarely
Correct spelling	Mostly	Sometimes	Rarely
Correct grammar	Mostly	Sometimes	Rarely
Correct punctuation	Mostly	Sometimes	Rarely
Smooth transitions, i.e., absence of rapid topic shifts	Mostly	Sometimes	Rarely

Appendix 2b. Contemporary Research Articles: Written Communication Rubric II

This rubric includes verbatim and adapted concepts from the Association of American Colleges and Universities (https://teaching.berkeley.edu/sites/default/files/value_rubric_packet.pdf).

Existing Knowledge	<ul style="list-style-type: none">a. Advanced Skills: Synthesizes in-depth information from the relevant source representing various points of view/approachesb. Competent Skills: Presents in-depth information from the relevant source representing various points of view/approachesc. Emerging Skills: Presents information from the relevant source representing limited points of view/approachesd. Novice Skills: Presents information from irrelevant sources representing limited points of view/approaches
Analysis	<ul style="list-style-type: none">a) Advanced Skills: Organizes and synthesizes evidence to reveal insightful patterns, differences, or similarities related to major ideasb) Competent Skills: Organizes evidence to reveal important patterns, differences, or similarities related to major ideasc) Emerging Skills: Organizes evidence, but the organization is not effective in revealing important patterns, differences, or similarities of the major ideasd) Novice Skills: Lists evidence but the information is unorganized and/or weakly supports major ideas
Conclusion	<ul style="list-style-type: none">a) Advanced Skills: Writes a logical, balanced, and integrated conclusion; Includes content analysis, and evidence-supported opinions about the article.b) Competent Skills: Writes a logical, but not integrated, conclusion; Focuses on individual, but not collective, elements of the article; Some balance of the topics' relative importance.c) Emerging Skills: Writes a general summary of the article and her/his opinions.d) Novice Skills: Writes an ambiguous, and unsupported conclusion about the article.

Appendix 3a. Critical Analysis of Speech Sound Disorders

1. Consider background information about the App

Developer	Who developed the app?
Seller	Who sells the app?
Compatibility	Which technologies are compatible with it?
Languages	In what languages is the app available?
Ages	For what ages is the app advertised?
Price	How much does the app cost?
Age	When was the app last updated?
Field Tests	Describe field tests that were conducted with SLPs or children when the app was developed
Motor Skills	Describe the motor skills necessary to use this app
Visual Skills	Describe the visual skills necessary to use this app
Auditory Skills	Describe the auditory skills necessary to use this app

2. Use the following questions to guide your critical analysis:

A. Student Engagement

1. Is the app easy to use and navigate?
2. Would students find this app interesting? Why?
3. Would the app hold a child's attention?
4. Will children be motivated to use the app more than once?
5. What else might you say about this app's level of student engagement?

B. Design Features

1. Is the layout clear and consistent?
2. Is the interface intuitive?
3. Are the graphics interesting?
4. Is tech support available from the developer? Is it easy to obtain?
5. Does the software track and store correct and incorrect answers?
6. Does the app allow for data collection from multiple users?
7. Does the app allow you to record and store your own written notes?
8. Does the app provide an error analysis (i.e., tell you why an answer is incorrect)?
9. Does the app record someone's voice and allow for playback?
10. Are the background images and sounds not too distracting?
11. Can the app's content be customized for an individual student?
12. Does the app allow you to personalize it with someone's photograph?
13. Can the sound features be turned off or modified?
14. Can the visual features be turned off or modified?
15. Does the app include visual and/or auditory prompts?

16. Does the app appear to be free of bugs and crashing?
17. What else might you say about this app's design features?

C. Content

1. Is the app's content consistent with articulation & phonology goals? Why?
2. Does the app support general language development? How?
3. Does the app support critical thinking skills? How?
4. Is the app developmentally appropriate for its advertised user's age?
5. Does the app have a variety of difficulty levels?
6. Does the app support skill generalization?
7. Is the content culturally inclusive?
8. What else might you say about this app's content?

3. Draw a conclusion and summarize your opinions about the app

Opinions	What did you like and dislike about this app?
Opinions	Would you recommend this app to other SLPs? Why or why not?
Opinions	Why would you recommend or not recommend that parents purchase this app to use at home?
Opinions	Is the app reasonably priced for what it does? Why or why not?

Please note: These items were adapted or taken verbatim from 7 resources: Lubniewski et al., (2017); Teachers with Apps (2019); Educators Technology (2019); Ok et al., (2016), American Psychiatric Association (2020); Vincent (2012); Brady (2014)

Appendix 3b
Apps Review: Oral and Written Communication Rubric

Names of Presenting Student(s)

Student Evaluator

The oral presentation and/or written handout presented comprehensive information about:			
1. Background information	Yes	Sort Of	No
2. Design features	Yes	Sort Of	No
3. Content	Yes	Sort Of	No
4. Student engagement	Yes	Sort Of	No
5. The app's utility	Yes	Sort Of	No
The oral presentation and/or written handout presented convincing opinions and evidence about:			
6. Why the reviewers liked or disliked the app	Yes	Sort Of	No
7. Why the reviewers would or wouldn't recommend the app to other SLPs	Yes	Sort Of	No
8. Why the reviewers would or wouldn't recommend the app to parents to use at home	Yes	Sort Of	No
9. Why the app was reasonably priced for what it does	Yes	Sort Of	No

Comments:

Appendix 4a
Self-Reflection on Clinical Assessment
Standardized Test Batteries

Standardized Test	Age Group
1. Goldman-Fristoe Test of Articulation-3 (GFTA-3) with Khan-Lewis Phonological Analysis (KLPA) Combo Kit	Ages 2-0 to 21-11
2. GFTA-3 Spanish Complete Kit	Ages 2-0 to 19-11
3. Clinical Assessment of Articulation and Phonology (CAAP-2)	Ages 2-0 to 11-11 (parts) Ages 5-0 to 11-11 (parts)
4. Hodson Assessment of Phonological Patterns (HAPP-3)	Ages 3-0 to 7-11 years
5. Arizona Articulation and Phonology Scale (4th edition) (Print Kit)	Ages 18 months to 21 years
6. H-PAT; HearBuilder Phonological Awareness Test (PAT) Kit	Ages 4-6 to 9-11 for some Others start at 5-6
7. Comprehensive Test of Phonological Processing, Second Edition, CTOPP2 Complete Kit	Ages 4-0 to 14-11; extension to 15-0 to 24-11
8. Test of Phonological Awareness 2nd Edition Plus Test Set	Ages 5-0 to 6-11

Appendix 4b. Self-Reflection on Clinical Assessment Rubric Items

1. Gave clear and specific directions Example:	Yes	Sort of	No
2. Gave appropriate amount of information to the client Example:	Yes	Sort of	No
3. Used language level that was appropriate for the client Example:	Yes	Sort of	No
4. Intentionally listened to the client Example:	Yes	Sort of	No
5. Used appropriate rate of speech Example:	Yes	Sort of	No
6. Used appropriate amount of speech Example:	Yes	Sort of	No
7. Confirmed that the client understood the directions Example:	Yes	Sort of	No
8. Appeared confident in the session Example:	Yes	Sort of	No
9. Had an appropriate energy level Example:	Yes	Sort of	No
10. Time was well managed Example:	Yes	Sort of	No
11. Provided adequate feedback and reinforcement Example:	Yes	Sort of	No
12. Detected and utilized unplanned assessment opportunities Example:	Yes	Sort of	No
13. Modified assessment as-needed during the session Example:	Yes	Sort of	No
14. Administered nonstandardized tasks correctly Example:	Yes	Sort of	No
15. Administered standardized tests correctly Example:	Yes	Sort of	No
16. Interpreted nonstandardized tasks correctly Example:	Yes	Sort of	No
17. Interpreted standardized tests correctly Example:	Yes	Sort of	No
18. Describe what you learned about assessment of speech sound disorders			
19. Describe what you liked and disliked about assessment of speech sound disorders			
20. Describe what you learned about yourself from this experience			

Please note: verbatim and adapted items from: Storkel, H. (2015). Student clinicians self-evaluating performance by reviewing session videos and using a rubric. *Perspectives on Administration and Supervision*, 25, 78-84.

Appendix 5
Phonological Treatment Activity/Materials Share
Oral Communication Rubric

Name of Presenting Student(s)

Reviewer's Name

Effectively described the approach	Strongly Agree	Agree	Disagree	Strongly Disagree
Provided an effective concrete example of a treatment activity	Strongly Agree	Agree	Disagree	Strongly Disagree
Provide well-reasoned opinions about the approach's utility	Strongly Agree	Agree	Disagree	Strongly Disagree
This activity and the materials are likely to hold a child's attention	Strongly Agree	Agree	Disagree	Strongly Disagree
I would use this activity and the materials in a therapy session	Strongly Agree	Agree	Disagree	Strongly Disagree

Comments