

POCKET ASSESSMENT OF SPEECH SOUNDSTM

PASSTM

Manual, Scoring, and Reference Sheets

**a comprehensive, criterion-referenced
assessment of consonant phonemes,
consonant clusters, and vocalic /r/**

JORDYN R. MONTIQUE, M.S. CCC-SLP

POCKET ASSESSMENT OF SPEECH SOUNDS

Table of Contents

- 1 - About the Pocket Assessment of Speech Sounds (PASS)
- 1 - What's Included
- 3 - How to Use
- 3 - Scoring and Interpretation Summary
- 6 - Positional Analysis
- 7 - Place, Manner, and Voicing Feature Analysis
- 8 - Item Analysis Chart
- 9 - Stimulability Guidelines
- 9 - Sentence-Level Intelligibility
- 10 - Oral Motor Interpretation
- 12 - Age of Acquisition Chart
- 13 - AAE Dialectal Differences
- 14 - Phonological Processes
- 15 - Note from the Author
- 16 - Digital Library Access

POCKET ASSESSMENT OF SPEECH SOUNDS

About

The Pocket Assessment of Speech Sounds (PASS) is a comprehensive, criterion-referenced assessment designed to evaluate speech sound production at the word and connected speech level. The PASS includes 82 target words that elicit 186 phoneme opportunities across all word positions, including 31 consonant clusters and 22 vocalic /r/ targets. The stimulus book contains 66 high-quality images to support child-friendly, engaging, and culturally mindful elicitation. Sentence-level prompts are included to assess intelligibility and speech sound production in connected speech.

The PASS is intended for use by speech-language pathologists working with children ages 2 and up. It is designed to be administered individually, in a supportive, quiet environment to ensure accurate results. The PASS can be used for screening, diagnostic evaluation, progress monitoring, and treatment planning across school-based, clinic, teletherapy, and in-home settings.

What's Included

The PASS Stimulus Book

- 82 target words producing 186 phoneme opportunities across all word positions
- Includes 31 consonant clusters and 22 vocalic /r/ contexts
- Features 66 engaging, culturally mindful images for developmentally appropriate elicitation
- Compact and travel-friendly for school, clinic, home, or teletherapy use

PASS Scoring System

- PASS Scoring Sheet (10 copies included + lifetime digital access)
- Record accuracy by word position and determine total percentage accuracy.
- Positional Accuracy Guide (initial, medial, final)
- Severity Classification Key (mild → severe)
- Quick Formula Card for rapid scoring (laminated)

Stimulability Sheet

- Document cueing strategies and independent production attempts.

Sentence Level Prompts

- Assess speech sound production in connected speech for generalization beyond single-word contexts.

POCKET ASSESSMENT OF SPEECH SOUNDS

What's Included (Cont.)

Oral Structural & Motor Screening

- Oral Motor Exam Checklist
- Screen for oral structural or motor characteristics that may influence intelligibility.

Error Pattern & Feature Analysis

- PASS Item Analysis Guide
- Evaluate patterns by place, manner, voicing, word position, consonant clusters, and vocalic /r/ variations.

Developmental & Cultural Reference Materials

- Criterion-Referenced Age of Acquisition Chart
 - Identify which sounds are typically emerging, developing, or mastered based on research data.
- Phonological Processes Chart
 - Includes definitions, examples, ages of suppression, & AAE-specific interpretation guidance.
- AAE Speech Sound Dialectal Differences Guide
 - Supports identity-affirming, non-pathologizing evaluation of African American English speech patterns.

Additional Included Materials

- Laminated Quick Reference Card (severity levels, scoring formula, common error considerations)
- Digital Library Access (via QR Code)
- Scoring sheets (fillable + printable)
- Stimulability sheets
- Sentence prompts
- Oral motor exam form

POCKET ASSESSMENT OF SPEECH SOUNDS ³

How to Use

1) Administer the Stimulus Flip Book

Flip through the PASS stimulus book to elicit target words.

Prompt the client by asking open naming questions such as:

- “What’s this?”
- “What do you see?”
- If the child does not name the item independently, use a natural, non-leading prompt: “This is a _____. Can you say _____?”

2) Record Productions Using the Scoring Sheet

Use the PASS Scoring Sheet to:

- Mark incorrect productions
- Track errors by word position
- Tally the total number of errors

Scoring and Interpretation Summary (Steps 3–5)

3) Calculate the Overall Accuracy Percentage

After scoring all items, determine the Percentage of Phonemes Correct (PPC) using the steps below:

- $186 - \# \text{ of errors} = \# \text{ of correct productions}$
- $\# \text{ of correct productions} \div 186 \times 100 = \% \text{ correct}$
 - Ex: $186 - 32 \text{ errors} = 154 \text{ correct}$
 - $154 \div 186 = 0.827 \times 100 = 82.7\% \text{ PPC}$

4) Interpret the score

Interpret the PPC using PASS-specific severity ranges tailored for word-level accuracy:

% Phonemes Correct	Severity	Clinical Description
95–100%	Within Normal Limits	Occasional developmental errors; intelligible
85–94%	Mild	Several consistent single-sound errors, distortions, or substitutions
70–84%	Moderate	Frequent sound-class errors; noticeable intelligibility impact
<70%	Severe	Multiple phoneme classes affected; speech often unintelligible

How to Use

Note: These cut-offs are adjusted for single-word performance and may differ from conversational PCC norms.

5) Reference the Age of Acquisition Chart

After identifying the severity range, reference the Criterion-Based Age of Acquisition Chart to evaluate whether the child's errors are developmentally appropriate.

1. Locate the child's chronological age on the chart.
2. Review sounds expected to be mastered at 50%, 70%, and 90% accuracy.
3. Compare the child's error sounds to these developmental expectations.
4. Determine whether the child's performance reflects:
 - Age-appropriate variation
 - Slight developmental delay
 - Significant delay/disorder

Measure	Purpose	How to Use
% Phonemes Correct (PPC)	Quantitative measure of overall accuracy	Determine general severity using PASS-specific chart
Severity Rating	Describes functional impact	Reference chart: WNL / Mild / Moderate / Severe
Age of Acquisition Chart	Developmental comparison	Identify if errors are expected for age or represent delay/disorder
Positional & Feature Analysis	Diagnostic insight	Identify patterns by word position, place, manner, and voicing
Stimulability & Sentence Level Data	Treatment planning	Determine readiness to learn and generalization ability

PASS scoring integrates both quantitative accuracy and developmental benchmarks. Clinicians should always interpret scores in the context of age expectations, phonological patterns, and overall intelligibility.

How to Use

6) Complete Stimulability Testing (Strongly Recommended)

Stimulability testing offers insight into responsiveness to teaching and informs target selection.

On the Stimulability Sheet, record:

- Sounds produced in error
- Cueing or supports provided
- Whether the sound was produced independently after instruction

Include this information in your report to describe learning potential.

7) Assess Connected Speech

Use the Sentence-Level Prompts to examine speech sound production in connected speech.

Compare performance at the word versus sentence level to observe:

- Intelligibility
- Carryover
- Generalization of correct productions

8) Conduct the Oral Motor Screening

Use the Oral Motor Exam Checklist to document oral structure and movement patterns that may influence speech clarity, coordination, or stability.

Note any observed differences in the comments section.

9) Analyze Error Patterns

Use the PASS Item Analysis to examine productions by:

- Word position (initial, medial, final)
- Place, manner, voicing
- Consonant clusters and vocalic /r/ variations

To calculate errors for a specific category:

- # of errors ÷ # of opportunities. → multiply by 100 → subtract total by 100
 - Ex: 7 errors ÷ 25 opportunities = 0.28 → 100 – 28 = 72% accuracy

10) Identify Phonological Processes

Refer to the Phonological Processes Chart to determine whether patterns are:

- Developmentally expected
- Persisting beyond expected elimination ages
- Impacting intelligibility

11) Differentiate Difference vs. Disorder

Use the AAE Speech Sound Dialectal Differences Guide to determine whether a production reflects a dialectal difference rather than a disorder.

Positional Analysis

Positional analysis allows clinicians to examine whether speech sound accuracy varies across initial, medial, and final word positions.

Instructions:

1. On the PASS Scoring Sheet, tally the number of correct and incorrect productions in each position.
2. Calculate accuracy for each position:
 - Take the number of errors in that word position, divide by the total number of opportunities for that position, multiply by 100, and subtract that number from 100 to get the accuracy percentage.
 - Ex: Example: Child produced 8 errors in the initial position, and there were 68 total opportunities in that position:
 - Divide 8 by 68 = 0.12
 - Multiply by 100 = 12
 - Subtract from 100 → $100 - 12 = 88\%$ accuracy
 - Interpretation: The child produced sounds correctly in the initial position 88% of the time, with errors on 12% of initial-position phonemes.

Total Opportunities (by position):

- Initial = 68
- Medial = 54
- Final = 64

Example:

A child produced 8 initial-position errors, 12 medial, and 15 final.

Position	Errors	Total Opportunities	% Accuracy
Initial	8	68	88%
Medial	12	54	78%
Final	15	64	77%

Interpretation: Performance was strongest in initial position and weakest in final. Such patterns may guide target selection (e.g., final consonant production).

Place, Manner, and Voicing Feature Analysis

Feature analysis helps identify broader articulatory patterns underlying multiple sound errors that contribute to multiple sound errors.

Instructions:

1. Use the Item Analysis tool to organize errors by feature type.
2. Calculate accuracy for each feature category:
 - 100 minus Errors in Feature divided by Total Opportunities in Feature, multiplied by 100
 - Example: If a child made 9 errors in the “manner” feature category out of 48 total opportunities:
 - Divide 9 by 48 = 0.19
 - Multiply by 100 = 19
 - Subtract from 100 → 100 - 19 = 81% accuracy

Feature	Errors	Total Opportunities	% Accuracy
Place	14	52	73%
Manner	9	48	81%
Voicing	4	40	90%

Interpretation: Weakness in place contrasts may indicate fronting or backing, while lower manner accuracy may reveal stopping, gliding, or cluster simplification.

The **Item Analysis Chart** is not intended as a scoring or recording sheet. It serves as a companion reference for interpretation and planning

	Initial	Medial	Final
Consonant Clusters	6, 9, 15, 26, 34, 44, 49, 54, 55, 56, 57, 58, 59, 60, 61, 62, 64, 65, 66, 67, 68, 69, 70, 71, 79		2, 30, 38, 40, 42, 63
Vocalic /r/	40, 77	51, 76, 81, 82	6, 21, 31, 35, 36, 52, 55, 69, 72, 73, 74, 75, 78, 79, 80, 81
Stops (single consonant) p, b, t, d, k, g	1, 2, 4, 8, 11, 12, 13, 14, 16, 29, 32, 35, 51, 52, 63, 72, 76, 78, 80, 81	6, 21, 25, 35, 47, 48, 65, 74, 81	1, 2, 3, 7, 10, 11, 12, 13, 14, 17, 34, 38, 39, 42, 48, 49, 51, 56, 58, 60, 82
Nasals (single consonant) m, n, ŋ	19, 22, 24, 28, 42	68	15, 18, 25, 27, 44, 45, 50, 53, 61, 62, 64, 66, 70, 76
Fricatives (single consonant) f, v, θ, ð, s, z, ʃ	3, 18, 21, 23, 25, 27, 31, 33, 45, 75	31, 32, 59, 65	4, 8, 9, 19, 20, 22, 23, 24, 26, 28, 29, 30, 41, 43, 46, 57, 59, 77
Affricates (single consonant) tʃ, dʒ	20, 36, 38, 41, 73		37, 40, 68
Liquids (single consonant) l, r	30, 39, 46, 48, 50, 53, 74	5	47, 65
Glides (single consonant) w, j	5, 7, 37	55	

Stimulability

Stimulability Guidelines

Purpose: Stimulability testing assesses whether a child can produce errored sounds after receiving cues or models. This identifies readiness for change and informs therapy planning.

How to Administer:

1. After identifying error sounds on the scoring sheet, present each sound in isolation and simple syllables (CV or VC).
2. Provide cues as needed (visual, verbal, tactile).
3. Record the level of support required:
 - Independent
 - With minimal cue
 - With maximal cue
 - Not stimuable

Recording Results:

Use the Stimulability Sheet to note whether each target was produced correctly with support. Calculate the percentage of stimuable sounds.

Clinical Tip: Start intervention with stimuable sounds to build early success, or non-stimuable sounds if aiming for broader system change.

Sentence-Level Intelligibility Guidelines

Sentence-level prompts in the PASS help determine how accurately and clearly a child produces speech sounds in connected speech.

How to Measure

1. Have the child repeat or create each prompt sentence.
2. Listen for overall clarity and accuracy.
3. Use the Percent of Intelligible Sentences as your main score:

Percent of Intelligible Sentences = (Number of Intelligible Sentences ÷ Total Sentences) × 100

Example:

If the child produces 8 intelligible sentences out of 10:

$8 \div 10 = 0.8 \rightarrow 80\%$ intelligibility

Percent Intelligible Sentences	Functional Description
90-100%	Speech fully intelligible; minimal occasional errors
75-89%	Generally intelligible; some listener effort required
60-74%	Reduced intelligibility; frequent errors, context helps
<60%	Poor intelligibility; speech often unclear even in context

Oral Motor Interpretation

Oral Motor Summary

The PASS Oral Motor Exam Checklist provides a structured screening of oral structures and functions that influence speech sound production. Use this checklist to determine whether oral structure or function may impact speech sound production.

Purpose

This screening helps determine whether reduced intelligibility or sound errors may be influenced by:

- Structural differences (e.g., asymmetry, abnormal palate formation)
- Motor coordination challenges (e.g., groping, slow rate, poor sequencing)
- Functional weakness (e.g., reduced range or strength impacting placement)

Note: The PASS oral motor exam is a screening tool and should not be used as a standalone diagnostic assessment.

Category

Interpretation/Clinical Considerations

Face – symmetry, abnormal movements, mouth breathing

Drooping or spasms may indicate neuromotor involvement. Consistent mouth breathing may signal airway or resonance concerns.

Jaw and Teeth – range, symmetry, TMJ noises

Jerky or asymmetrical movement may indicate instability or poor grading; TMJ noise may reflect tension or misalignment.

Dentition – occlusion, alignment, hygiene

Malocclusion or missing teeth can affect production of labiodental and alveolar sounds; note but do not over-attribute errors to dentition alone.

Lips – range, symmetry, strength

Reduced seal or asymmetry may affect bilabial sounds (p, b, m, w); drooping may indicate weakness or cranial nerve involvement. Palate (hard/soft) – structure, elevation, resonance

Tongue – size, range, strength, frenum mobility

Reduced range or strength may impact alveolar, velar, and palatal sounds; short frenum can limit elevation or protrusion.

Palate (hard/soft) – structure, elevation, resonance

Abnormal color or structure may indicate clefting or submucous cleft; poor elevation may contribute to hypernasality.

Diadochokinetic Rate (DDK) – speed, rhythm, precision

Slowed or inconsistent DDK rate suggests difficulty with motor planning or coordination (e.g., dysarthria, apraxia). Use provided norms for ages 6–13 as reference.

Oral Motor Interpretation

Interpretive Summary

- Normal findings across all categories: Suggests that speech errors are likely phonological or learned rather than motoric.
- Isolated weakness, asymmetry, or restricted range: May contribute to articulatory imprecision for specific sounds (e.g., reduced lip closure affecting /p, b, m/).
- Multiple or severe abnormalities: May indicate motor speech involvement (e.g., dysarthria, CAS) or structural etiology; consider referral for medical or ENT evaluation.

Average Age of Acquisition (in years:months)

Standard deviations for each criterion are written in parentheses. Phonemes with larger standard deviations suggest there is greater variation in language acquisition for that specific sound.

Consonant	50% Criterion	75% Criterion	90% Criterion
p	2:5 (7 months)	2:7 (6 months)	2:7 (7 months)
b	2:5 (7 months)	2:7 (6 months)	2:6 (8 months)
t	2:6 (6 months)	2:8 (7 months)	3:2 (9 months)
d	2:5 (7 months)	2:7 (5 months)	3:0 (7 months)
k	2:6 (6 months)	2:8 (5 months)	3:1 (7 months)
g	2:6 (6 months)	2:8 (5 months)	3:1 (7 months)
m	2:5 (7 months)	2:7 (6 months)	2:8 (7 months)
n	2:5 (7 months)	2:7 (6 months)	2:7 (8 months)
ŋ	2:5 (6 months)	3:1 (12 months)	3:4 (11 months)
f	2:6 (6 months)	2:8 (5 months)	3:2 (6 months)
v	2:7 (5 months)	3:6 (12 months)	4:2 (11 months)
θ	3:8 (8 months)	5:3 (5 months)	6:4 (7 months)
ð	3:5 (5 months)	4:7 (7 months)	5:7 (11 months)
s	2:7 (6 months)	3:2 (10 months)	4:3 (16 months)
z	2:8 (6 months)	3:7 (17 months)	4:7 (14 months)
ʃ	2:7 (6 months)	3:4 (10 months)	4:6 (10 months)
h	2:5 (7 months)	2:7 (6 months)	2:9 (7 months)
ɹ	2:9 (7 months)	3:9 (13 months)	5:5 (19 months)
j	2:7 (5 months)	3:3 (8 months)	3:8 (11 months)
l	2:7 (5 months)	3:4 (8 months)	4:4 (10 months)
w	2:5 (7 months)	2:7 (6 months)	2:9 (7 months)
tʃ	2:8 (4 months)	3:5 (9 months)	4:5 (11 months)
dʒ	2:8 (4 months)	3:4 (9 months)	4:3 (12 months)

AAE Dialectal Differences

Phoneme	Initial	Medial	Final
v			may not be produced (five->fai; believe->beleee; give->gi)
ð	can be pronounced with /d/ (them ->dem)	can be pronounced with /v/ (mother->mʌvə), /d/ (father->fadə), or /t/ (nothing->nun)	
θ		can be pronounced /f/ (athlete -> aflete)	can be pronounced /f/ (mouth -> mouf)
d			may not be produced following another consonant (cold -> col)
l			post vocalic may be produced as back vowel (bell->beʊ, ball->baw) may not be produced when postvocalic and before a labial consonant (help->hep; rudolph->rudof) /l/ is required in initial and medial positions, not final positions of words or clusters (told-> toad; tool -too)
ɹ		may not be produced (alright-> /aait/) not required post-vowel. Not required between a consonant and back-rounded vowel	may not be produced (store->stəʊ), (car -> /cɑ/)
ŋ			may be produced as /n/ (giving -> givin')
eə			may be produced as /ə-/ (heər "hair"->hə- "her")
ə			may be pronounced /ə/ (player->pleɪjə)
/st/ cluster			produced as single consonant /s/ (test -> tes)

Rule	Example
clusters can have flexible productions	asks->aks, escape ->ikskape
unstressed syllable may not be produced	about -> bout appreciate -> 'preciate
reduplicated syllables may not be produced	mississippi->mi si pi probably ->proibly
final consonants may not be produced in various context, most common with stop consonants and glides	pool -> poo vet -> vε
voiced fricatives preceding syllabic nasals may be stopped	seven->sebm wasn't->wudnt
/i/ and /ɪ/ are interchangeable; /ε/ and /ɪ/ are interchangeable	boil -> bɔɪ or bɔɪl our ->ɔr feel -> fiɪ thing ->θeiŋ pen -> piŋ
in some southern dialects, mostly Memphis, cluster rhotacization	music->mrusic cute->crute

- Also note changes in prosody, pitch, intonation, rhythm, stress, and semantics
- Consider differences in location, age, and gender
- Each individual speaker will vary - all AAE speakers do not share the same characteristics
- Non-Black individuals may also speak with characteristics of AAE secondary to location, community, or other influences, such as social media

Phonological Processes

The patterns of sound errors that we use to simplify speech as skills develop. A **phonological disorder** is considered when these processes persist past developmental expectations.

Substitutions	Definition	Example	Approx. Age of Elimination
Affrication	non-affricate substituted with an affricate	"cheap" for "sheep"	5:0
Backing	alveolar sounds substituted with velar sounds	"go" for "doe"	Not within typical development
Deaffrication	affricate substituted with a fricative or stop	"ships" for "chips"	4:0
Fronting	velar or palatal sound substituted with alveolar sounds	"tup" for "cup"	4:0
Gliding	liquid substituted with a glide	"wed" for "red" or "yion" for "lion"	5:0-6:0
Stopping*	fricative or affricate substituted with a stop	"teep" for "sheep" or "pan" for "fan"	/f, s/ - 3:0 /z, v/ - 4:0 /sh, ch, j, th/ - 5:0
Vocalization (Vowelization)	/l/ or /er/ substituted with a vowel	"apps" for "apple" or "papua" for "paper"	3:0 - 4:0
Labialization*	tongue tip consonants substituted with labials or bilabials	"mouf" for "mouth" or "bog" for "dog"	6:0
Depalatalization	palatal sound substituted with non palatal sound	"fit" for "fish"	5:0

Assimilations	Definition	Example	Approx. Age of Elimination
Assimilation (Consonant Harmony)	one sound becomes the similar or the same to another sound in the same word	"bab" for "bad", "nan" for "can"	3:0
Devoicing*	voiced final consonant substituted with voiceless	"bat" for "bad"	3:0
Prevocalic Voicing	initial voiceless consonant substituted with voiced	"gomb" for "comb"	3:0
Denasalization	nasal phoneme substituted with non nasal	"doze" for "nose"	2:6

Syllable Structure	Definition	Example	Approx. Age of Elimination
Cluster Reduction*	consonant cluster reduced to a single consonant	"pane" for "plane" or "top" for "stop"	4:0 - 5:0
Final Consonant Deletion*	final consonant of a word is left off	"toe" for "toad"	3:0
Initial Consonant Deletion	initial consonant of a word is left off	"funny" for "bunny"	Not within typical development
Weak Syllable Deletion	weak syllable of a word is deleted	"nana" for "banana"	4:0
Coalescence	two phonemes are substituted with a phoneme that has similar features	"food" for "spoon"	Not within typical development
Epenthesis	vowel sound is added between two consonants, typically the "uh" sound	"bu-luh" for "blue"	Not within typical development
Metathesis	two sounds or segments are transposed	"cimmanin" for "cinnamon"	Not within typical development
Reduplication	complete or incomplete syllable is repeated	"baba" for "bottle"	2:0

AAE Considerations:

Labialization & Stopping:
th substituted for /f, v, t, d/

"mouf" (mouth), "both" (bof),
"wit" (with), muhver
(mother), "dat" (that), "da"
(the) etc.

Cluster Reduction:
medial and final position

"fas" (fast), "respec" (respect),
"han" (hand), "frenly"
(friendly), "col" (cold), etc.

Final Consonant Deletion:
typically /r/, /ŋ/ or tense
marker

"push" (pushed), "fo" (for),
"sto" (store), "sista" (sister) etc.

Devoicing:
final consonant

"pick" (pig), "periot"
(period)

Note from the Author

Thank you for using the Pocket Assessment of Speech Sounds (PASS), an assessment created in hopes of decreasing how much our field relies on standardized assessments. This assessment requires true analysis of errors and your own clinical judgement. Reducing reliance on standardized assessments and including references such as the AAE Dialectal Differences guide will decrease the risk of bias adversely impacting our evaluations.

It is essential that speech sound assessments are informative, effective, and practical. The PASS was designed to provide information that you can immediately put to use in therapy, provide resources to families, and quickly start to make a difference.

We have the ability to change people's lives for the better, forever. We need to have the right tools if we are going to do that to the best of our ability.

Thank you again for choosing the PASS. Please share any feedback or suggestions via email to hello@raynetherapy.com.

Digital Library Access

Your companion hub for the Pocket Assessment of Speech Sounds (PASS)

Thank you for using the PASS! This digital library includes printable forms, reference charts, and scoring tools to help you administer, score, and interpret the assessment with ease. All files are viewable online, or downloadable for your personal professional use. Use the QR code below or visit raynetherapy.com/pass-digital-library.

