The 25 tests and tasks in the Madison Speech Assessment Protocol (MSAP).

Measure	Speech task	Acronym	Age group[a] 1	2	3	4	Description and goal	Stimuli
Goldman-Fristoe Test of Articulation-2 (2nd ed.)[b]	X	GFTA-2	X	X	X		The Sounds-in-Words section of the GFTA-2 provides supplementary production phonology information at the single word level.	34 picture plates (53 target words).
Audiological and (optionally) Acoustic Immittance Screening Task[c]		None	X				Audiologic and acoustic immittance screening data provide status on hearing and middle ear functioning at the time of assessment and supplement case history information.	Pulsed pure tones presented at 500, 1000, 2000, and 4000 Hz at 20 dB for the audiologic screening.
Conversational Speech Sample	X	CSS	X	X	X	X	The CSS is the primary data source for production phonology, including segmental and suprasegmental (PVSP) data. It can also be used to obtain natural language production data.	If needed, pictures or books are used to evoke spontaneous conversational speech.
Lexical Stress Task	X	LST	X	X	X	X	The LST provides perceptual and acoustic information on a participant's ability to realize lexical stress in two-syllable words produced in imitation in a carrier phrase.	24 pictured two-syllable words (e.g. 'chicken'), including 8 trochees, 8 iambs, and 8 spondees; recorded stimulus for each word in the carrier phrase 'Say ____'.
Challenging Words Task	X	CWT	X	X	X	X	The CWT provides information on a participant's ability to correctly sequence and produce sounds in 12 challenging words containing a variety of consonants (mostly Early- and Middle-8 sounds) and vowels in imitation. Multiple repetitions provide information on the stability of productions.	12 pictured words (e.g. 'helicopter'), each presented 3-times; recorded stimulus for each token.
Vowel Task 1	X	VT1	X	X	X	X	VT1 provides information on the 4 corner vowels /i,æ,u,ɑ/ in single words produced in imitation. Multiple repetitions provide information on the stability of productions.	4 pictured CVC words (e.g. 'bat'), each presented 4 times; recorded stimulus for each token.

Vowel Task 2	X	VT2	X	X	X	X	X	VT2 provides information on the 11 non-corner vowels and diphthongs in single words produced in imitation. Multiple repetitions provide information on the stability of productions.	11 pictured CVC words (e.g. 'bite'), each presented 4-times; recorded stimulus for each token.
Vowel Task 3	X	VT3	X	X	X	X	X	VT3 provides information on vowels in 5 sentences produced in imitation. Multiple repetitions provide information on the stability of productions.	5 pictured sentences (e.g. 'He has a blue pen'), each presented 4-times; recorded stimulus for each token.
Syllable Repetition Task		SRT	X	X	X	X		The SRT provides information on speech processing in two- (CVCV), three- (CVCVCV), and four-syllable (CVCVCVCV) nonsense words using four Early-8 consonants /b,d,m,n/ and a single low back vowel /ɑ/ to minimize articulatory challenges.	Recorded stimulus for each of the 18 nonsense words (e.g. /bɑmɑnɑ/)
Non-word Repetition Task[a]		NRT	X	X	X	X		The NRT provides information on speech processing using nonsense words.	Recorded stimulus for each of 16 nonsense words—four for each of 1-syllable, 2-syllable, 3-syllable, and 4-syllable words (e.g. /teːvɑk/)
Emphatic Stress Task	X	EST	X	X	X	X	X	The EST provides information on a participant's ability to realize emphatic stress within short sentences. In each of the four trials for each of two sentences, a different word is stressed.	Recorded stimuli for two 4-word sentences (e.g. 'May I see PETE'), repeated 4-times each.
Rhotics and Sibilants Task	X	RST	X	X	X	X		The RST provides information for /r/ and /s/ productions obtained in imitated single words embedded in the carrier phrase 'Say ____ again'.	Recorded stimuli for 10 words (e.g. 'soon', 'bird'), each repeated 4-times.
Multiyllabic Words Task 1	X	MWT1	X	X	X			MWT1 provides information on single words selected to represent difficult articulatory sequences. It assists in evaluating phonological planning, sound sequencing, and transitions from one sound to another. The MWT1 includes 25 single words for children aged 3;0–11;11.	Recorded stimulus for each of 25 words (e.g. 'animal').

(Continued)

Measure	Speech task	Acronym	Age group[a]				Description and goal	Stimuli
			1	2	3	4		
Multisyllabic Words Task 2	X	MWT2			X	X	See description for MWT1. MWT2 includes 20 single words for participants aged 12;0 and up.	Recorded stimulus for each of 20 words (e.g. 'emphasis').
Speech Phrases Task[e]	X	SPT	X	X	X	X	The SPT provides information on 25 two- and three-word phrases selected to represent difficult articulatory sequences. It assists in evaluating phonological planning, sound sequencing, and transitions from one sound to another.	Recorded stimulus for each of 25 phrases (e.g. 'big farm house')
Diadochokinesis Task	X	DDK	X	X	X	X	The DDK task provides information on a participant's ability to coordinate rapid, accurate, and rhythmic alternating movements of the lips and tongue within a single place of articulation and across 2 and 3 places of articulation (bilabial, alveolar, and velar).	Two 1-consonant syllable strings (e.g. 'papapa'), three alternating 2-consonant syllable strings, one alternating 3-consonant syllable string, and the word 'pattycake'.
Sustained Vowel Task	X	SVT	X	X	X	X	The SVT provides information on a participant's respiratory-laryngeal capacity and laryngeal quality.	The vowel /ɑ/.
Sustained Consonant Task	X	SCT	X	X	X	X	The SCT provides information on a participant's respiratory-laryngeal capacity.	The consonant /f/.
Orofacial Examination Task	X	OET	X	X			The OET provides information on the structure and function of the speech mechanism.	None.
Oral and Written Language Scales[f]		OWLS	X	X	X	X	The OWLS provides information on language comprehension and production.	Two books of picture plates, one each for the comprehension and production sub-tests.
Woodcock-Johnson III Tests of Achievement[g]		WJ-III				X	The WJ-III provides information on language skills in adults in the areas of Letter-Word Identification Test 1)	Test 1: Single letters and increasingly difficult words (e.g. 'provincial') are displayed for participant's to

and Word Attack (Test 13). [Optional tests include: Test 7–Spelling; Test 9–Passage Comprehension; Test 11–Writing Samples).

							pronounce. Test 13: Single letters and increasingly difficult non-words (e.g. 'fronkett') are displayed for participant's to pronounce.
Kaufman Brief Intelligence Test (2nd ed.)[h]	KBIT-2	X	X	X	X	The KBIT provides information on cognitive functioning using scores from the KBIT2's three verbal and non-verbal sub-tests.	Two books of picture plates are used for all of the non-verbal and some of the verbal test items.
Case History Form	CHF		X	X	X	The CHF provides risk factor information on a participant's medical, social, academic, hearing, family aggregation, and speech-language history.	None.
Case History Interview	CHI		X	X	X	The CHI supplements and clarifies the information collected on the participant's CHF.	None.
Examiner Checklist	EC		X	X	X	The EC provides information on the examiner's impressions of selected aspects of the participant's behaviour and psychosocial development/affect.	None.

[a] Age group 1: Pre-school = 3;0–5;11; Age group 2: School-age = 6;0–11;11; Age group 3: Adolescent = 12;0–17;11; Age group 4: Adult = 18;0+.
[b] Goldman and Fristoe (2000); [c] American National Standards Institute (1989); [d] Dollaghan and Campbell (1998); [e] Catts (1986); [f] Carrow-Woolfolk (1995); [g] Woodcock, McGrew, and Mather (2001); [h] Kaufman and Kaufman (2004).