



**Table 2. WIAT-4 Subtest Input and Output Requirements and Equivalence Evidence**

<b>Subtest(s)</b>	<b>Input</b>	<b>Output</b>	<b>Indirect Telepractice Evidence Citation: Task Abbreviation</b>
Alphabet Writing Fluency	Brief spoken directions, response booklet	Task level time limit, simple written response	Dekhtyar et al., 2020: AN, WDW, WID, WND, WO Hodge et al., 2019: CD, SS Wright, 2018a: SPS Wright, 2018b: LPM, SWF, WSp Wright, 2020: CD, SS
Decoding Fluency	Brief spoken directions, words in print	Task level time limit, spoken response	Dekhtyar et al., 2020: RCd, RCS, RIW, RNW Harder et al., 2020: LWI, SRF, WA Stain et al., 2011: WTAR Wright, 2018a: SPS Wright, 2018b: LWI, LPM, OR, SRF, MFF, WA
Essay Composition	Spoken directions, response booklet	Open ended, task level time limit, written response	Dekhtyar et al., 2020: WDW, WID, WND, WO Wright, 2018b: SWF, WSp
Listening Comprehension-Receptive Vocabulary	Brief spoken directions, picture stimuli	Multiple choice, pointing or brief spoken response	Harder et al., 2020: VC Sutherland et al., 2017: WC Vestal et al, 2006: ACWP Wright, 2020: VC
Listening Comprehension-Oral Discourse Comprehension	Spoken directions, audio recorded stimuli, spoken stimuli	Open ended, spoken response	Galusha-Glasscock et al., 2016: SM Wright, 2018a: StR, VA Wright, 2018b: VM
Math Fluency-Addition, Subtraction, and Multiplication	Spoken directions; letters, digits, or symbols in print; response booklet	Open ended, task level time limit, written response	Dekhtyar et al., 2020: CL Harder et al., 2020: CL, MF Wright, 2018b: CL, MFF

<b>Subtest(s)</b>	<b>Input</b>	<b>Output</b>	<b>Indirect Telepractice Evidence Citation: Task Abbreviation</b>
Math Problem Solving	Brief spoken directions; letters, digits, or symbols in print; spoken stimuli; tables and graphs in print; words in print	Multiple choice, open ended, brief spoken response, pointing response	Dekhtyar et al., 2020: CL, MC Harder et al., 2020: CL Wright, 2018b: AP Wright, 2020: AR
Numerical Operations	Brief spoken directions; letters, digits, or symbols in print; words in print; response booklet	Open ended, written response	Dekhtyar et al., 2020: CL Harder et al., 2020: CL, MF Wright, 2018b: CL, MFF
Oral Expression- Expressive Vocabulary	Brief spoken directions, picture stimuli, spoken stimuli	Brief spoken response	Brearly et al., 2017: BNT Cullum et al., 2006: BNT Cullum et al., 2014: BNT Dekhtyar et al., 2020: PD Galusha-Glasscock et al., 2016: PN Harder et al., 2020: VC Sutherland et al., 2017: FS, WS Vestal et al., 2006: BNT, PD Wadsworth et al., 2018: BNT Waite et al., 2010: FS, WS Wright, 2020: VC
Oral Expression- Oral Word Fluency	Brief spoken directions	Open ended, task level time limit, spoken response	Brearly et al., 2017: SF Dekhtyar et al., 2020: WF Galusha-Glasscock et al., 2016: SF Harder et al., 2020: CF Hildebrand et al, 2004: CWAT Stain et al., 2011: CWAT Wright, 2018b: PP

Subtest(s)	Input	Output	Indirect Telepractice Evidence Citation: Task Abbreviation
Oral Expression-Sentence Repetition	Brief spoken directions, spoken stimuli	Spoken response	Cullum et al., 2006: DS Cullum et al., 2014: DS Dekhtyar et al., 2020: DS Galusha-Glasscock et al., 2016: DS Grosch et al., 2015: DS Harder et al., 2020: DS Hodge et al., 2019: DS Jacobsen et al., 2003: DS Stain et al., 2011: DS Sutherland et al., 2017: RS Vahia et al., 2015: DS Wadsworth et al., 2018: DS Waite et al., 2010: RS Wright, 2018b: NR Wright, 2020: DS
Oral Reading Fluency Orthographic Fluency	Brief spoken directions, words in print	Task level time limit, spoken response	Dekhtyar et al., 2020: RCd, RCS, RIW, RNW Harder et al., 2020: LWI, SRF, WA Hodge et al., 2019: CD, SS Stain et al., 2011: WTAR Wright, 2018a: SPS Wright, 2018b: LWI, LPM, OR, SRF, MFF, WA Wright, 2020: CD, SS
Orthographic Choice	Brief spoken directions, words in print	Pointing response	Dekhtyar et al., 2020: RCd, RCS, RIW, RNW, SWR Stain et al., 2011: WTAR Wright, 2018b: LWI, OR, WA
Phonemic Proficiency	Brief spoken directions, audio recorded stimuli	Brief spoken response	Brearly et al., 2017: SF Dekhtyar et al., 2020: WF Galusha-Glasscock et al., 2016: SF Wright, 2018b: PP
Pseudoword Decoding	Brief spoken directions, words in print	Open ended, spoken response	Dekhtyar et al., 2020: RCd, RCS, RIW, RNW Harder et al., 2020: LWI, WA Stain et al., 2011: WTAR Wright, 2018b: LWI, OR, WA
Reading Comprehension	Brief spoken directions; picture stimuli; words in print	Multiple choice (early items), open ended, pointing response (early items), spoken response	Dekhtyar et al., 2020: RCd, RCS, RIW, RNW Stain et al., 2011: WTAR Wright, 2018b: LWI, OR, PCO, WA

<b>Subtest(s)</b>	<b>Input</b>	<b>Output</b>	<b>Indirect Telepractice Evidence Citation: Task Abbreviation</b>
Sentence Composition	Spoken directions, words in print, response booklet	Open ended, written response	Dekhtyar et al., 2020: WDW, WID, WND, WO Wright, 2018b: SWF, WSp
Sentence Writing Fluency	Brief spoken directions, gestured directions, response booklet	Task level time limit, written response	Dekhtyar et al., 2020: WDW, WID, WND, WO Harder et al., 2020: CD, SS Wright, 2018b: SWF, WSp Wright, 2020: CD, SS
Spelling	Brief spoken directions, spoken stimuli, response booklet	Written response	Dekhtyar et al., 2020: SP, WDW, WID, WND Wright, 2018b: SP
Word Reading	Brief spoken directions; letters, digits, or symbols in print; words in print	Multiple choice (early items), open ended, pointing response (early items), spoken response	Dekhtyar et al., 2020: RCd, RCS, RIW, RNW Harder et al., 2020: LWI, WA Stain et al., 2011: WTAR Wright, 2018b: LWI, OR, WA

**\*Evidence column task abbreviations:** ACWP = Aural Comprehension of Words and Phrases, AN = Alphabet and Numbers, AP = Applied Problems, AR = Arithmetic, BNT = Boston Naming Test, CD = Coding, CF = Category Fluency, CL = Calculation, CWAT = Controlled Word Association Test, DS = Digit Span, FS = Formulated Sentences, LPM = Letter-Pattern Matching, LWI = Letter-Word Identification, MC = Math Calculation, MFF = Math Fluency/Math Facts Fluency, NR = Numbers Reversed, OR = Oral Reading, ORF = Oral Reading Fluency, PCO = Passage Comprehension, PD = Picture Description, PN = Picture Naming, PP = Phonological Processing, RCd = Reading Commands, RCS = Reading Comprehension of Sentences, RIW = Reading Irregular Words, RNW = Reading Nonwords, RS = Recalling Sentences, SF = Semantic Fluency, SM = Story Memory, SP = Spelling, SPS = Spelling of Sounds, SRF = Sentence Reading Fluency, SS = Symbol Search, StR = Story Recall, SWF = Sentence Writing Fluency/Writing Fluency, SWR = Spelled Word Recognition, VA = Verbal Attention, VC = Vocabulary, VM = Verbal Memory, WA = Word Attack, WC = Word Classes, WDW = Writing Dictated Words, WF = Word Fluency, WID = Writing Irregular Words to Dictation, WND = Writing Nonwords to Dictation, WO = Writing Output, WS = Word Structure, WSp = Writing Samples, WTAR = Wechsler Test of Adult Reading. While equivalence data on similar measures are relevant, practitioners should be mindful that more research is needed to establish equivalence in all ages and for all tasks on the WIAT-4.