



Overview of Goldman-Fristoe Test of Articulation-3 Administration and Scoring



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Disclosures

Financial:

- Chien (Shannon) Wang is an employee of Pearson Clinical Assessment.
- Course content focuses on GFTA-3. Pearson Assessment is the publisher of the GFTA-3 and is hosting this webinar. No other assessments will be discussed during this session.

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Agenda

- Introduction and Overview
- GFTA-3 Administration and Scoring
- GFTA-3 Interpretation
- GFTA-3 Technical Information
- Q&A

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Learning Objectives

1. Name two differences between the GFTA-2 and GFTA-3.
2. Provide one example of a case when dialect-sensitive scoring would be appropriate.
3. List at least two factors to consider when evaluating an examinee's error patterns on GFTA-3.

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GFTA-3: What's New?

- Assess consonants in multiple contexts--every consonant error is scored
- Dialect-sensitive scoring
- Standard scores for connected speech sample (ages 4+)
- Intelligibility measure--compare an individual's intelligibility to same age/same sex peers
- Updated norms
- Age appropriate art for ages 2:0 – 6:11 and 7:0 – 21:11
- Digital administration and scoring options

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Administration and Scoring Options



Q-interactive®



Two iPads, connected by Bluetooth




Q-global®



OR





Print Kit

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Sounds-in-Words test

- Same test administration format
- Two sets of picture stimuli
- Suggested cues provided
- Stimulability measure
- Marking errors
- Scoring
- New analyses
 - Consonant error
 - R error
 - Vowel error

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Sounds-in-Words administration format

Present the picture stimuli and the examinee names the picture.

If a examinee doesn't label a picture spontaneously, provide the suggested cue.

You can provide a different cue that follows the format provided. If that doesn't work, the examinee can imitate the target word.

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Goldman Fristoe 2
Test of Articulation

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Two sets of test stimuli

Look at this boy. What is he wearing on his foot? (shoe)

2:0 – 7:11 yrs. 8:0 + yrs.

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Two sets of test stimuli:
Example

An apple is a fruit; a carrot is a _____

2:0 – 6:11 yrs. 7:0 – 21:11 yrs.

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Phoneme production is tested in multiple contexts

All consonant errors are counted in the raw score.

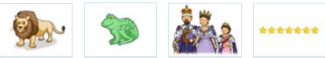
Examples of words testing Initial /p/

- Pig
- Puzzle
- Pajamas



Examples of words testing Final /n/

- Lion
- Green
- Crown
- Seven



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Scoring procedures

- **All** consonants are scored
- Dialect-sensitive scoring—do not count consonant variations attributable to differences from Standard American English (e.g., African American English, Appalachian English) or English influenced by another language
- Stimulability
 - Option of checking stimulability on error phonemes only
 - Check stimulability after administration of Sounds-in-Words or Sounds-in-Sentences

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Gender differences

- Separate norms for females and males through the entire age range (2:0 through 21:11)
- Mastery for all phonemes exhibited in singleton and cluster productions:
 - Age 7: 11 for females
 - Age 8: 11 for males

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Common Patterns: Vowels

- dialectal or diagnostic indicator
- a marker for apraxia
- almost exclusively central vowels indicating low tone


Sound	Words
i	Close, Front, Unrounded
ɪ	Close-Mid, Front, Unrounded
e	Close-Mid, Front, Unrounded
ɛ	Open-Mid, Front, Unrounded
æ	Open-Mid, Front, Unrounded
ɔ	Open-Mid, Back, Unrounded
ɒ	Open-Mid, Back, Unrounded
ɔ̃	Mid-Mid, Central, Unrounded
ɔ̃	Open, Back, Unrounded
ɔ̃	Open-Mid, Back, Rounded
ɔ̃	Close-Mid, Back, Rounded
u	Close-Mid, Central, Rounded
u	Close, Back, Rounded
ai	Diphthong
ai	Diphthong
ei	Diphthong

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Modified Sounds-in-Sentences

- New stories
- Sentence imitation task
- Ages 4+
- Report normative scores, including standard scores, percentile ranks, and age equivalents
- Intelligibility score



Story for Ages 4:0 through 6:11
What Animal Do You Think It Is?



Story for Ages 7:0 to 21:11
A Terrible Day

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Recording Responses for Sounds-in-Sentences

Sounds-in-Sentences (Ages 4:0-6:11)

Story 1: What Animal Do You Think It Is?

Picture	Story Text	Item	Target Word	IPA Transcription	Response (IPA Transcription)
1	Three friends are walking home from school.	1	walking	w ɔ k ɪ ŋ	
		2	school	s k u l	
2	They see something little, furry, and black.	3	something	s ʌ m ɒ ŋ	
		4	little	l ɪ t ə l	
		5	furry	f ɜ r i	
3	They see it zoom by and hide under a bush.	6	black	b l æ k	
		7	zoom	z u m	
		8	hide	h aɪ d	
		9	bush	b u ʃ	


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Technical Information

- Test Development
- Standardization Sample Characteristics
- Evidence of Validity
- Evidence of Reliability

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Psychometric Characteristics and Technical Information: Initial Development

- Test feedback
 - GFTA-3 test users
 - Content and bias review panel
 - Field test examiner feedback
- Literature review
 - Review of current best practices, including the ASHA Scope of Practice
 - Review of the research literature, especially information related to articulation assessment

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Psychometric Characteristics and Technical Information: Initial Development

Table 5.1 KIPA-3 Content and Bias Review Panel Members


Dolores Battle, Ph.D., CCC-SLP Professor Emeritus, SUNY Buffalo State Buffalo, New York	Greta T. Tan, M.A., CCC-SLP Cupertino Union School District Cupertino, California
Billie M. Highaagle, M.A., CCC-SLP First Nations Therapy Services Stokholmish Nation, Washington	Albert Villanueva-Reyes, Ed.D., M.S.C., CCC-SLP Speech-Language Pathology Program University of Puerto Rico San Juan, Puerto Rico
Deborah A. Hwa-Froelich, Ph.D., CCC-SLP Department of Communication Sciences and Disorders Saint Louis University St. Louis, Missouri	Carol Westby, Ph.D., CCC-SLP Bilingual Multicultural Services Albuquerque, New Mexico
Janna Oetting, Ph.D., CCC-SLP Department of Communication and Sciences and Disorders; Interdepartmental Program in Linguistics Louisiana State University Baton Rouge, Louisiana	Rosalyna (Lynita) Yarbrough, M.S., CCC-SLP Davis School of Communication Sciences and Disorders Texas Christian University Fort Worth, Texas


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Psychometric Characteristics and Technical Information: Research Phases


- **Pilot**
 - February and March 2013
 - N = 31, ages 2:0-5:11 and 7:0-17:11
 - Test site: San Antonio, TX
 - Primary objectives: reduce initial word list of 126 words
- **Tryout**
 - June 2013 through January 2014
 - N = 316, including children from 2:0-8:11
 - Test sites: more than 150 sites nationwide
 - Primary objectives:
 - Evaluate how speakers of dialects other than Mainstream American English produce the target words
 - Determine the target words to be included for the standardization research phase

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Psychometric Characteristics and Technical Information: Standardization

- Over 1500 individuals tested for standardization and related reliability and validity studies
- Sample representative of the US population (within 5% of US Census figures) stratified by
 - Parent Education Level
 - Race/Ethnicity
 - Region of the US
- 50% male; 50% female, with gender norms

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	Normative sample (%)	US population (%)
Parent Education Level		
0–12 years of school, no diploma	6.5	11.3
High school diploma or equivalent	18.7	22.4
Some college or technical school, associate's degree	38.5	34.8
Bachelor's degree or more	36.4	31.6
Race/Ethnicity		
African American	11.4	14.7
Asian	2.1	3.7
Hispanic	22.3	20.1
Other	7.1	5.8
White	57.1	55.6
Region		
Midwest	23.6	22.3
Northeast	13.1	16.1
South	40.5	38.5
West	22.9	23.1

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Languages Reported:
13% of the sample was bilingual

Languages reported

- Filipino/Tagalog
- French
- German
- Greek
- Hebrew
- Hmong
- Hungarian
- Kanda
- Mandarin
- Other Chinese languages
- Portuguese
- Potawatomi
- Cherokee
- Russian
- Spanish
- Tamil
- Telugu
- Vietnamese

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Scores Provided

Sounds-in-Words and Sounds-in-Sentences

- Standard scores
- Confidence intervals
- Percentiles
- Age equivalents
- Growth scale values

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Table 6.1 Reliability Coefficients and Standard Errors of Measurement for Female and Male Normative Samples

Age	Female	Male
2:0-2:5 alpha	.98	.98
2:6-2:11 alpha	.98	.99
3:0-3:5 alpha	.97	.91
3:6-3:11 alpha	.94	.96
4:0-4:5 alpha	.95	.97
4:6-4:11 alpha	.94	.92
5:0-5:11 alpha	.96	.93
6:0-6:11 alpha	.96	.95
7:0-7:11 alpha	.93	.95
8:0-8:11 alpha	.84	.92
9:0-10:11 alpha	.81	.90
11:0-21:11 alpha	.88	.87
Overall alpha	.94	.95

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Validity evidence: Sensitivity & Specificity

- $n = 54$
- Ages 4:0 to 8:11

GFTA-3 Score Standard Deviation	Cut Score	Sensitivity	Specificity
-1 SD	85	.91	.81
-1.5 SD	77	.87	.89
-2 SD	70	.78	.98


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On Q-interactive

What is Q-interactive?

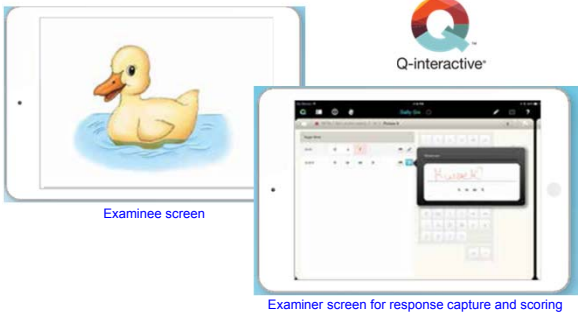
- Use two iPads: one for the examiner; one for the examinee
- Guides you through the assessment process
- Obtain scores automatically and immediately after test administration



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View of examiner and examinee iPad screens



Examinee screen


Examiner screen for response capture and scoring

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Q-interactive demo

See a video clip of a Q-interactive administration



Go to:


- PearsonClinical.com
- GFTA-3 (training tab)
- GFTA-3 and KLPA-3 Brief Overview webinar
- Slide 10

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PHONOLOGICAL ANALYSIS

Digital administration and scoring on Q-global

- Use any web-enabled device
- Digital stimulus book and manuals
- Use paper record forms
- Digital scoring
- Use "share screen" for telepractice





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KLPA3
KHAN-LEWIS
PHONOLOGICAL ANALYSIS


Obtain a KLPA-3 phonological process analysis on Q-interactive or Q-global...

with the press of a button!



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After completing a GFTA-3 administration on Q-interactive, you have the option to purchase a KLPA-3 phonological process analysis.




Q-global®

After administering GFTA-3 and entering the GFTA-3 item level information in Q-global, you have the option of purchasing GFTA-3 only scores or GFTA-3 and KLPA-3 scores with no additional data entry.

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In Remembrance



1933-2015

Ronald Goldman, our dear author, colleague and friend, passed away Tuesday, August 18, 2015.

Ron was one of the transformative leaders of our profession. He made a difference to millions of individuals with communication disorders, their families, his students, and colleagues past, present, and future.

We here at Pearson feel fortunate that we had the opportunity to work closely with him throughout the years—he was a beloved mentor and friend and will be sorely missed by his Pearson family.

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