




Pearson

## Transitioning from GFTA-2 to GFTA-3: Interpreting and Communicating Test Results with Stakeholders

Shannon Wang, MA CCC-SLP

September 13, 2017



Copyright © 2015 NCB Pearson, Inc. All rights reserved.

## Instructions for submitting forms for ASHA CEUs

**Pearson will submit completed CE forms to ASHA if you**  
Attend the entire 60 minutes of the live session  
(confirmed by our ReadyTalk verification report)

**Complete the**

- Attendance Sheet (only if more than one person is at your site)
- ASHA Participant Form
- Evaluation Form



**Please mail the forms postmarked no later than 9-25-17 to**

**Darlene Davis, Pearson**  
19500 Bulverde Road, Ste. 201  
San Antonio, TX , 78259

**Pearson will not submit completed CE forms to ASHA if**

- The mailed CE forms are postmarked after 9-25-17
- CE forms are sent via fax or email
- CE forms are submitted for "partial credit" (not available)
- CE forms are submitted if you view the webinar recording on [PearsonClinical.com](http://PearsonClinical.com) or [speechandlanguage.com](http://speechandlanguage.com).

**Questions about CEUs?**  
Contact Darlene Davis at [darlene\\_k.davis@pearson.com](mailto:darlene_k.davis@pearson.com)

## Learner Outcomes

As a result of this presentation, you will be able to

- Describe at least two error patterns that may contribute to an examinee's GFTA-2/GFTA-3 score differences
- Explain how to examine standard scores and additional speech sound emergence and mastery data in the Manual to appropriately interpret GFTA-3 results
- Describe average GFTA-2/GFTA-3 score differences and explain unusual score differences to parents and colleagues

## Content that is and is not included in this presentation

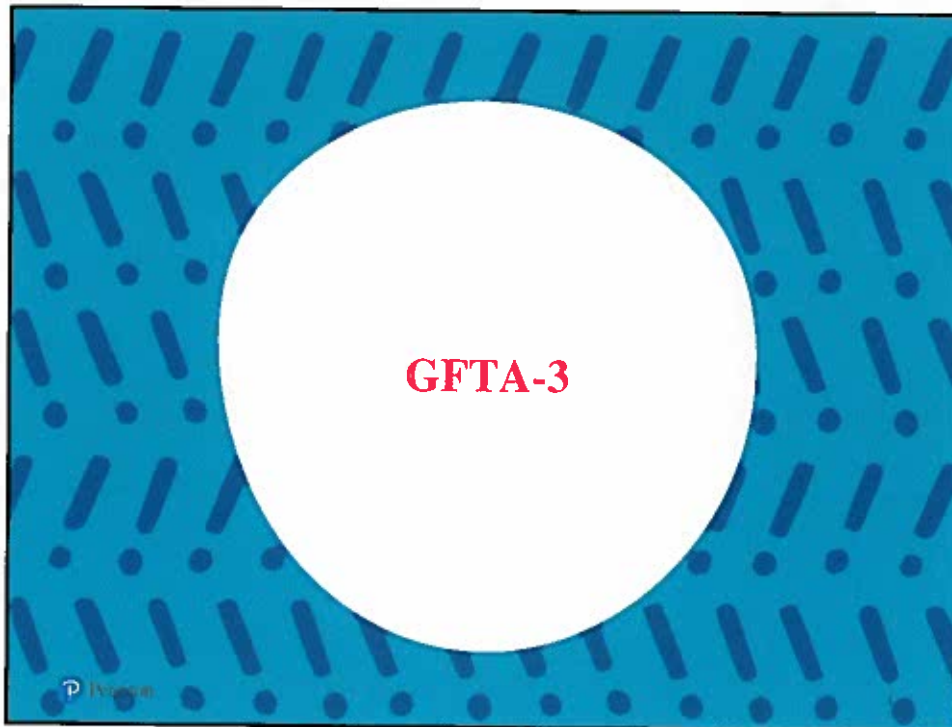
### Included

- Changes from GFTA-2 to GFTA-3
- Error patterns and how scores are affected
- Examining test scores in conjunction with emergence and mastery data
- Interpreting and explaining score difference to stakeholders

### Not included

- Detailed administration and scoring directions
- Technical characteristics of the test





## GFTA-3: Scoring and factors influencing test results

- **Consonants assessed in multiple contexts**
  - **Sounds-in-Words**
    - All consonant and cluster errors within a word are counted for the raw score, not just in selected words
  - **Sounds-in-Sentences**
    - Sentence imitation format
    - Intelligibility rating
    - All consonant and consonant cluster errors are counted in selected (not all) words in the sentence
- **Updated normative data**
  - The developmental trajectories for correctly producing sounds are similar in GFTA-2 and GFTA-3 and most available sound development charts

## Clinicians have questions about...

### ➤ Including words sensitive to assimilation processes

- *titar* for *guitar*
- *lello* for *yellow*



### ➤ More complex syllable shapes

- vegetable
- elephant
- pajamas
- princess



### ➤ High representation of some later developing sounds: /r/, /s/, /l/

### ➤ Higher Sounds-in-Sentences scores than Sounds-in-Words scores

## Distribution of Consonants in GFTA-3

The GFTA-3 word set was chosen to

- minimize the administration time, and
- meet as many of the criteria as possible
  - Targeted multiple occurrences (2-3) of almost all consonants in each position (exceptions: single occurrence in *thr* > 3 exemplars (final *n*, *r*, *-er*)
  - Range in complexity of syllable shapes (from CV and CVC words to a handful of complex syllable shapes)
  - Words that were familiar to a diverse population of examinees
  - Words selected had a minimum of dialectal variations (e.g., deleted the word *sandwich* after tryout)
- while maintaining excellent psychometric properties of the item set
  - consistent developmental progression across age
  - high internal consistency
  - clinical utility (words that best differentiated performance between children who are typically-developing and children who are developing atypically)

## GFTA-3 Scoring

### Scoring Differences

- Score every occurrence of every consonant
- Dialect sensitive scoring: *Score dialectal responses as correct* if you have evidence to confirm that the individual speaks a dialect other than Standard American English.

Recording a Substitution

|    |           |                               |    |   |   |
|----|-----------|-------------------------------|----|---|---|
| 39 | vegetable | <del>vɛdʒtəbəl</del> bedtəbəl | b  | d | t |
| 40 | brushing  | brʌʃɪŋ                        | br | ʃ | ŋ |
| 41 | blue      | blu                           | bl |   |   |
| 42 | yellow    | jɛlo                          | j  | l |   |
| 43 | brother   | brʌðə                         | br | ð | ə |
| 44 | frog      | fɹɔg                          | f  |   | d |
| 45 | green     | grɪn                          | gr |   | n |

Recording an Omission

| Item | Target Word | IPA Transcription | Response | Initial | Medial | Final |
|------|-------------|-------------------|----------|---------|--------|-------|
| 30   | finger      | fɪŋgə             |          | f       | ŋ      | g     |
| 31   | ring        | rɪŋ               |          | r       |        | ŋ     |
| 32   | thumb       | θʌm               |          | θ       |        | m     |
| 33   | elephant    | ɛləfənt           | fənt     |         |        | m     |
| 34   | vacuum      | vækjuəm           |          | v       | k      | m     |
| 35   | shovel      | ʃəvəl             |          | ʃ       | v      | l     |
| 36   | teacher     | ti:tʃə            |          | t       | ʃ      | ə     |
| 37   | zebra       | zɛbrə             |          | z       | br     |       |
| 38   | graffe      | grɑ:f             |          | g       | r      |       |

## GFTA-3 Scoring

### Recording No Response

|    |           |                         |    |   |   |
|----|-----------|-------------------------|----|---|---|
| 39 | vegetable | <del>vɛdʒtəbəl</del> NR |    |   |   |
| 40 | brushing  | brʌʃɪŋ                  | br | ʃ | ŋ |
| 41 | blue      | blu                     | bl |   |   |
| 42 | yellow    | jɛlo                    | j  | l |   |
| 43 | brother   | <del>brʌðə</del> NR     |    |   |   |

## **GFTA-3 Scoring: Dialects**

### **Transcribe, but do not count as errors**

#### Dialect-appropriate responses

- English influenced by Spanish:  
e.g., “sh” for “ch” in the word “cheese”
- African-American English and Southern English:  
e.g., “n” for “ng” in the word “brushing”
- English influenced by Asian Languages:  
e.g., “l” for “r” in the word “red”

## **GFTA-3 Scoring: Dialects**

### **Transcribe, but do not count as errors**

#### Dialect-appropriate responses

- English influenced by Spanish:  
e.g., “sh” for “ch” in the word “cheese”
- African-American English and Southern English:  
e.g., “n” for “ng” in the word “brushing”
- English influenced by Asian Languages:  
e.g., “l” for “r” in the word “red”

## Added Diacritic Markings to productions: Counting as error depends on...

Diacritic marks are used to note that there is a difference in how a sound is produced.

### Marking the sound difference

- Record Form: Diacritic marks can be transcribed on the form
- Q-interactive (digital platform using two iPads): Open the Notes box and write the diacritic mark there.

### Determining if the production should be counted as an error

#### Do *not* count as an error if

- the sound production is different than the target, but is due to dialectal difference
- if the articulators seem misplaced during the production but the sound remains acoustically accurate

#### Count as an error if

- the diacritic mark is used to note a difference in production from the target that is not due to dialectal difference



110

## Sounds-in-Sentences

- Structured task:  
Sentence repetition vs. GFTA-2 story re-tell
- Score only the target words/sounds
  - The target words showed a performance difference between examinees identified as having a speech sound disorder and examinees identified as typically-developing

| Story Text   | Item | Target Word | IPA Transcription |
|--|------|-------------|-------------------|
| Three friends are <u>walking</u> home from <u>school</u> . | 1    | walking     | wɔkɪŋ             |
| Intelligibility Rating: 1 2 3 4                            | 2    | school      | skul              |

- An intelligibility rating can be calculated



111

## Sounds-in-Sentences: Calculating Intelligibility Rating

|           |   |                        |                       |      |                                    |
|-----------|---|------------------------|-----------------------|------|------------------------------------|
| Picture 5 | The children look under the bush's thick branches.<br>Intelligibility Rating: 1 (1) 2 3 4 | 33 children / children | f                     | r    | n                                  |
|           |   | 34 thick / thick       | t                     | k    |                                    |
|           |   | 35 branches / branches | b                     | r    | n                                  |
|           | They shout, "It's a puppy!"<br>Intelligibility Rating: 1 (1) 2 3 4                        | 36 shout / shout       |                       |      |                                    |
|           | The puppy sees the kids.<br>Intelligibility Rating: 1 (1) 2 3 4                           | 37 kids / kids         |                       |      | d                                  |
|           | It drops a green ball from its mouth.<br>Intelligibility Rating: 1 (1) 2 3 4              | 38 drops / drops       | d                     | r    |                                    |
|           |   | 39 green / green       | g                     | w    | n                                  |
|           |   | 40 ball / ball         | b                     |      |                                    |
|           |   | 41 mouth / mouth       | m                     |      | t                                  |
|           | It barks, "Play catch with me!"<br>Intelligibility Rating: 1 (1) 2 3 4                    | 42 play / play         | p                     |      |                                    |
|           |   | 43 catch / catch       | k                     | t    |                                    |
|           | Intelligibility Rating Subtotals  |                        | Items 33-43 Subtotals |      |                                    |
|           | 1 Good  | 2 Fair                 | 3 Poor                | 4 NR | Transfer Items 1-32 Subtotals here |
|           | 8   | 12                     | 0                     | 0    | 6 1 3                              |
|           | Total Raw Score   |                        |                       |      | 15                                 |

Note: Misarticulation or omission of one or more phonemes in a cluster counts as one error. Distortions are counted as errors.

© Pearson  
Identifying Typical and Atypical Speech Patterns Using GFTA-3 and K-LPA-2

## Calculating Intelligibility Rating Score

Rate intelligibility in each sentence: Good (1), Fair (2), Poor (4), or No response (4)

Record the sum for ratings of "1"

Add the sums for Ratings 1, 2, 3, and 4. Record the total.

Divide the Total of Good ratings(1) by the total ratings.

Divide the Total of "Good" ratings by the total and multiply the quotient by 100. Record the value in the Overall Intelligibility Rating box.

Compare the examinee's rating to the cumulative percentages of the normative sample earning an intelligibility rating of <90% or ≥90% by age (Appendix C)

| GFTA-3 Intelligibility Rating Summary |                            |                                |                            |
|---------------------------------------|----------------------------|--------------------------------|----------------------------|
| Total of Good Ratings (1)             | Total of All Ratings (1-4) | Overall Intelligibility Rating | Intelligibility Percentage |
| 18                                    | 20                         | 90%                            | 72.5 < 90%                 |
|                                       |                            |                                | 82.5 ≥ 90%                 |



## Map Test Results on the Emergence and Mastery Tables, Appendix D, RF pg. 8

**Table D.1** Ages at Which Phonemes Were Present in 50%, 75%, and 90% of Normative Sample (Male)

| Emergence* of Phonemes by Age | Produced by 50% of children            |  |  | Produced by 75% of children            |  |  | Produced by 90% of children            |  |  |
|-------------------------------|--|--|--|--|--|--|--|--|--|
|                               | 2;0-2;5                                | 2;6-2;11                               | 3;0-3;5                                | 3;6-3;11                               | 4;0-4;5                                | 4;6-4;11                               | 5;0-5;11                               | 5;6-5;11                               | 6;0-6;11                               |
|                               | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' |
|                               | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' |
|                               | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' |
|                               | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' |
|                               | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' |
|                               | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' |
|                               | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' |
|                               | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' |
|                               | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' | h, t, k, p, g, b, d, f, v, w, z, s, z' |

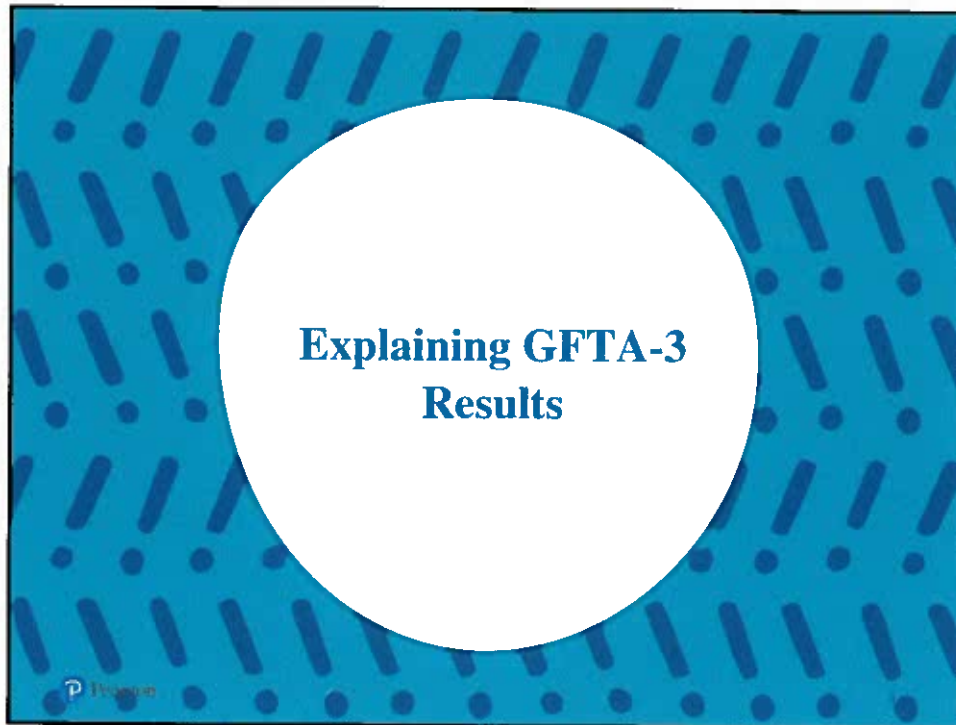
**Table D.2** Ages at Which 90% of the GFTA-3 Normative Sample Mastered Consonants and Consonant Clusters by Initial, Medial, and Final Position (Male)

| Mastery** of Phonemes by Age | Initial position                          | Medial position                        | Final position             |
|------------------------------|---|--|----------------------------|
|                              | 2;0-2;5                                   | m, n, l                                | t, p                       |
| 2;6-2;11                     | m, n, l                                   | t, p                                   |                            |
| 3;0-3;5                      | m, n, l, k, p, g, b, d, f, v, w, z, s, z' | t, p, k, p, g, b, d, f, v, w, z, s, z' | g, b, d, f, v, w, z, s, z' |
| 3;6-3;11                     | m, n, l, k, p, g, b, d, f, v, w, z, s, z' | t, p, k, p, g, b, d, f, v, w, z, s, z' | g, b, d, f, v, w, z, s, z' |
| 4;0-4;5                      | m, n, l, k, p, g, b, d, f, v, w, z, s, z' | t, p, k, p, g, b, d, f, v, w, z, s, z' | g, b, d, f, v, w, z, s, z' |
| 4;6-4;11                     | m, n, l, k, p, g, b, d, f, v, w, z, s, z' | t, p, k, p, g, b, d, f, v, w, z, s, z' | g, b, d, f, v, w, z, s, z' |
| 5;0-5;11                     | m, n, l, k, p, g, b, d, f, v, w, z, s, z' | t, p, k, p, g, b, d, f, v, w, z, s, z' | g, b, d, f, v, w, z, s, z' |
| 5;6-5;11                     | m, n, l, k, p, g, b, d, f, v, w, z, s, z' | t, p, k, p, g, b, d, f, v, w, z, s, z' | g, b, d, f, v, w, z, s, z' |
| 6;0-6;11                     | m, n, l, k, p, g, b, d, f, v, w, z, s, z' | t, p, k, p, g, b, d, f, v, w, z, s, z' | g, b, d, f, v, w, z, s, z' |
| 7;0-7;11                     | m, n, l, k, p, g, b, d, f, v, w, z, s, z' | t, p, k, p, g, b, d, f, v, w, z, s, z' | g, b, d, f, v, w, z, s, z' |
| 8;0-8;11                     | m, n, l, k, p, g, b, d, f, v, w, z, s, z' | t, p, k, p, g, b, d, f, v, w, z, s, z' | g, b, d, f, v, w, z, s, z' |
| > 8;11                       | m, n, l, k, p, g, b, d, f, v, w, z, s, z' | t, p, k, p, g, b, d, f, v, w, z, s, z' | g, b, d, f, v, w, z, s, z' |

\* Emergence = 1 or more correct productions  
 \*\* Mastery = 85% or greater correct productions

## Emergence and Mastery Tables

- Help you interpret and explain test scores referencing the examinee's results to developmental data
- Help you identify the age when you expect consonants to emerge in an examinee's repertoire
  - ☐ the age when you expect consonants to be correctly produced at least one or more times on the GFTA-3.
- Help you identify the age when you expect consonants and consonant clusters to be mastered
  - ☐ the age when you expect consonants to be produced with at least 85% accuracy.



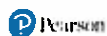
## Why are GFTA-3 scores *different* from GFTA-2?

- The U.S. population is different
  - Dialectal variations from Standard American English scored as correct for GFTA-3
- Test item set is different
- Scoring is different
  - Every opportunity for a consonant and consonant cluster production is counted (leading to reporting separate emergence and mastery tables)
  - Clinicians cannot re-score GFTA-2 to see how the scores differ from GFTA-3.
- The resulting raw scores and norms are different, although
  - GFTA-3 means for each sound match the GFTA-2 Supplemental Developmental Norms booklet
  - GFTA-2/GFTA-3 Study: Mean score difference is 2.8 SS lower\*
  - Atypical populations that we test may score much lower depending on speech pattern

## Why are GFTA-3 scores different from GFTA-2? *(continued)*

- **GFTA-2 Premise:** If a phoneme is counted as correct, the child has mastered production of that phoneme.
- **GFTA-3 Premise:** Phonemes should be tested in multiple contexts because productions can be affected by surrounding vowels and consonants and the complexity of the word structure. Children begin to correctly produce phonemes at different ages, with a time period between emergence and mastery of sounds.

*Low standard scores indicate that a child's speech is not comparable to age/gender peers.*



101

## Sounds-in-Sentences: Why do I sometimes get a GFTA-3 S-in-S score higher than the S-in-W score?

Although the Sounds-in-Sentences task is an *imitation* task, it is a more difficult task than a *spontaneous single word* task.



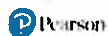
102

## Sounds-in-Sentences:

### Why do I sometimes get a GFTA-3 S-in-S score higher than the S-in-W score?

Because Sounds-in-Sentences is a more difficult task,

- Typically developing children make more errors on Sounds-in-Sentences than on Sounds-in-Words.
- Children with a speech sound disorder also make more errors on Sounds-in-Sentences than they do for Sounds-in-Words.
- Performance differences between typically developing children and children with a speech sound disorder is minimized (the two groups perform more similarly on the sentence task).



120

## Has speech sound developmental data really changed?

### Emergence

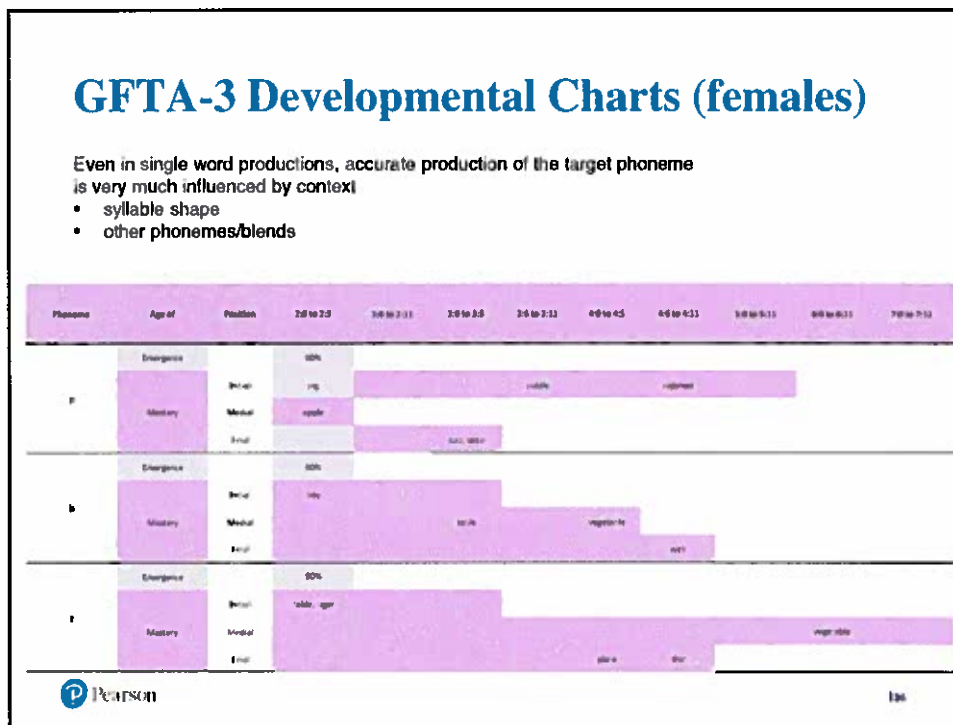
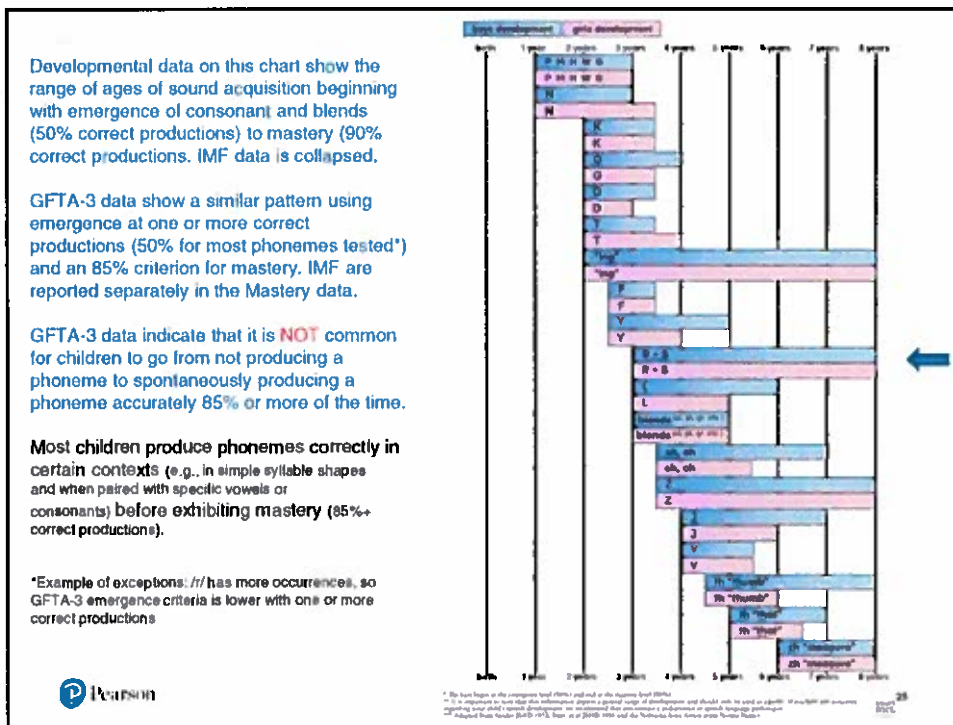
- Age at which a phoneme is present (one or more correct productions) in the child's repertoire.
- Reported as the ages at which 50%, 75% and 90% of children spontaneously produced a phoneme correctly *one or more times* on GFTA-3, based on age and sex.

### Mastery

- Ages at which 90% of the GFTA-3 normative sample (by sex) produced the phoneme with at least 85% accuracy.



121



Omar, age 2:4

| Type of /r/   | Raw Score | Standard Score | Percentile Rank |
|---|-----------|----------------|-----------------|
| All /r/ productions and other errors +9 blends, th, it, syllicates, l, and eh | 63        | 98             | 45              |
| All /r/ productions, including clusters                                       | 22        | 120            | 91              |
| Only blend errors   | 9         | 129            | 97              |
| 4 errors  | 4         | 134            | 99              |
| 2 errors  | 2         | 136            | 99              |

Omar, age 4:4

| Type of /r/                             | Raw Score | Standard Score | Percentile Rank |
|---|-----------|----------------|-----------------|
| All /r/ productions, including clusters | 22        | 94             | 34              |
| Only blend errors                       | 9         | 107            | 68              |
| 4 errors                                | 4         | 115            | 84              |
| 2 errors                                | 2         | 118            | 88              |

Omar, age 6:4

| Type of /r/                             | Raw Score | Standard Score | Percentile Rank |
|---|-----------|----------------|-----------------|
| All /r/ productions, including clusters | 22        | 75             | 5               |
| Only blend errors                       | 9         | 90             | 25              |
| 4 errors                                | 4         | 98             | 45              |
| 2 errors                                | 2         | 105            | 63              |



127

Replace emergence data w

### GFTA-2 Supplemental Norms Booklet & GFTA-3 Table D.1 Ages At Which Phonemes are Present in the Normative sample (Males, /r/)

|   | 2:0 | 2:6 | 3:0 | 3:6 | 4:0 | 4:6 | 5:0 | 5:6 | 6:0 | 7:0 | 8:0 |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| I | .32 | .38 | .44 | .53 | .69 | .64 | .80 | .81 | .91 | .98 | .93 |
| M | .44 | .64 | .64 | .60 | .80 | .74 | .84 | .83 | .92 | .95 | .95 |
| F | .60 | .72 | .76 | .76 | .76 | .74 | .81 | .90 | .94 | .97 | .95 |

GFTA-2: % of boys producing the phoneme correctly (one opportunity)

Table D.1 Ages at Which Phonemes Were Present in 50%, 75%, and 90% of Normative Sample (Male)

| Age      | Produced by 50% of children | Produced by 75% of children  | Produced by 90% of children     |
|----------|-----------------------------|------------------------------|---------------------------------|
| 2:0-2:5  | l, r, t, d, n, k, w, ts     | h, j, v, f, s, z, ʃ, ʒ, ʎ, ɹ | g, m, p, ʌ, ɔ, ɔɪ, ɹ, ɻ         |
| 2:6-2:11 | ts, ʃ, ʒ                    | ɹ                            | ʃ, ʒ, ɹ, ɻ, ɹɪ, ɹɹ              |
| 3:0-3:5  | ts, ʃ, ʒ, ɹ, ɻ              | ɹ, ɻ                         | h, ʎ, ɹ, ʌ, ɔ, ɔɪ, ɹ, ɻ, ɹɪ, ɹɹ |

GFTA-3: Emergence Data: % of boys producing the phoneme one or more times correctly (multiple opportunities)



128



**GFTA-2 Supplemental Norms Booklet & GFTA-3 Table D.2 Ages At Which Phonemes are Mastered in the Normative sample (Males, /r/)**

|          | 2:0 | 2:6 | 3:0 | 3:6 | 4:0 | 4:6 | 5:0 | 5:6 | 6:0 | 7:0 | 8:0 |
|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <b>I</b> | .32 | .38 | .44 | .58 | .69 | .64 | .80 | .81 | .91 | .98 | .93 |
| <b>M</b> | .44 | .64 | .64 | .60 | .80 | .74 | .84 | .83 | .92 | .95 | .95 |
| <b>F</b> | .60 | .72 | .76 | .76 | .76 | .74 | .81 | .90 | .94 | .97 | .95 |

GFTA-2: % of boys producing the phoneme correctly (one opportunity)

**Table D.2** Ages at Which 90% of the GFTA-3 Normative Sample Mastered Consonants and Consonant Clusters by Initial, Medial, and Final Position (Male)

| Age      | Initial position                | Medial position       | Final position |
|----------|---------------------------------|-----------------------|----------------|
| 6:0-6:11 | rgt /r/ rda /r/ rpa /r/ rta /r/ | /r/                   |                |
| 7:0-7:11 | r /r/ rda /r/ rpa /r/ rta /r/   | /r/                   | /r/ /r/        |
| 8:0-8:11 |                                 | r/ r/ rda /r/ rpa /r/ | /r/ /r/        |

GFTA-3: Mastery data: 90% of boys producing the phoneme 85% or more correctly (multiple opportunities)



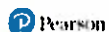
Omar, age 4:4, SS 94\*

A look at developmental patterns: age of mastery of error phonemes

**Table D.2** Ages at Which 90% of the GFTA-3 Normative Sample Mastered Consonants and Consonant Clusters by Initial, Medial, and Final Position (Male)

| MALE<br>Mastery of Phonemes by Age | Initial position                   | Medial position       | Final position |
|------------------------------------|------------------------------------|-----------------------|----------------|
|                                    | 2:0-2:5                            |                       |                |
| 2:6-2:11                           | mm                                 | pp                    |                |
| 3:0-3:5                            | ba /b/ ba /b/ ba /b/               | da /d/ na /n/ ni /n/  | pa /p/ ta /t/  |
| 3:6-3:11                           | ba /b/                             | da /d/ na /n/         | pa /p/ ta /t/  |
| 4:0-4:5                            | ba /b/                             | da /d/ na /n/         | pa /p/ ta /t/  |
| 4:6-4:11                           | ba /b/ /r/ rda /r/ rpa /r/         | /r/ rda /r/           | r/ /r/ rpa /r/ |
| 5:0-5:11                           | ba /b/ /r/ rda /r/ rpa /r/ rta /r/ | /r/ rda /r/           | r/ /r/ rpa /r/ |
| 6:0-6:11                           | ba /b/ rda /r/ rpa /r/ rta /r/     | /r/                   | r/ /r/ rpa /r/ |
| 7:0-7:11                           | ba /b/ rda /r/ rpa /r/ rta /r/     | /r/                   | r/ /r/ rpa /r/ |
| 8:0-8:11                           |                                    | r/ r/ rda /r/ rpa /r/ | r/ /r/         |
| > 8:11                             | r/                                 |                       | r/ /r/         |

\*Confidence Band: 90%: 90-98, %ile rank: 34



## What we know to be best practice

- The GFTA-3 score should never be the sole determiner for eligibility for services.
- The GFTA-3 score ≠ a comprehensive assessment.
  - The GFTA-3 score indicates how a child compares to same age/same gender peers.
  - The clinician determines appropriate next steps.
- GFTA-3 standard scores provide one part of the evidence you report as part of the comprehensive assessment.

## In addition to the GFTA-3 standard scores, qualitative GFTA-3 data should be considered

Based on child's age/gender, note performance and/or improvements

- Phoneme inventory
- Correct/incorrect phoneme productions in different syllable shapes and word contexts
- Developmental patterns
- Stimulability
- Productions in connected speech
- Intelligibility in words and sentences



## In addition to the GFTA-3 results, obtain data from

- Spontaneous connected speech sample
- Parent interview (behavior at home, concerns, priorities)
- Preschool teacher interview (academic/social emotional impact; participation in classroom)
- Observations with adults and peers
- Dynamic assessment to identify techniques that elicit correct productions

## What are the options?

- Monitor the child's speech in the classroom
- Do a re-check in six months
  - Improvement?
  - New facilitating context(s) acquired independently?
  - Implications
- Classroom Articulation lab
- Parent strategies
- Special Education services

## Omar, age 4:4

### Additional assessment results

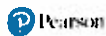
**Stimulability:** Omar is stimulable for final /r/.

#### Intelligibility:

- Omar's preschool teacher says she can understand his speech all the time.
- Omar earned "good" intelligibility ratings on 85% of the sentences he imitated in the S-in-S test.
- GFTA-3 data report that 60% of 4:0-4:5 year old children in the normative sample received an overall intelligibility percent of  $\geq 90\%$  "good" ratings.

#### Developmental considerations

Are vowel productions consistent? No concerns  
 Did consonants develop in expected sequence? No concerns  
 Evidence of atypical speech patterns/phonological processes No concerns



136

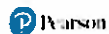
## Omar: In addition to GFTA-3 standard scores and emergence/mastery data,

#### Parent/teacher concerns and priorities

- His speech is "babyish" compared to his sister Rosie's speech when she was 4 years old.
- Parents want him to say his name and his sister's name correctly.

#### Impact on participation in preschool or in the home

- Observations of Omar in the classroom show that he talks readily with his classmates and teacher. The teacher reports that Omar is intelligible in class.
- Omar appears unaware of his /r/ errors at preschool.
- In a speech sample, there are a couple of words where Omar approximates a correct production of /r/.
- At home he is starting to avoid talking because he does not want to be corrected for saying /r/ incorrectly.



136

## What would you recommend?

### Parent/teacher concerns and priorities

His speech is "babyish" compared to his sister Rosie's speech when she was 4 years old. Parents want him to say his name and his sister's name correctly.

- Explain the /r/ developmental information to the parents
- Explain prognosis for self-correction of /r/ without enrollment in special education

### Impact on participation in preschool or in the home

Omar is unaware of his /r/ errors at preschool.

At home he is starting to avoid talking because he does not want to be corrected for saying /r/ incorrectly.

- Give parents strategies to
  - facilitate general speech and language development at home
  - support incidental learning of /r/, using the information you obtained during testing (e.g., contexts in which productions approximate /r/)
  - make practicing /r/ a positive experience

## Explaining GFTA-3 Results to Stakeholders

## Explaining test results to parents/teachers

- Parent or teacher concerns and priorities do not match expectations on GFTA-3 test results
- Parent or teacher expects the child to earn a low score; the child earns a GFTA-3 score in the average range.

When producing sounds, your child/student makes errors that some children her age make. She is able to imitate the sound correctly, which is a positive sign that she will learn to produce the sound correctly on her own given a little more time.

## Explaining test results to parents

- Parents express concern that their child earned lower scores on GFTA-3 following therapy than he earned on GFTA-2 at the beginning of treatment

On GFTA-2 (the test used at the beginning of the year), your child had to say the sound correctly in only one word. Most of the words on GFTA-2 are short, simple words.

On GFTA-3, your child's test score is lower because he had to say the sound correctly in two or more words, and some of those words are more difficult to say than the words on GFTA-2. Your child's score is lower on GFTA-3, not because his speech is getting worse, but because the requirement for producing the sounds correctly on the newer test is more stringent.

Let's talk about how your child's speech has improved in therapy. At the beginning of the year, your child said the sound correctly...

## Explaining test results when results don't match your expectations

- Clinician expects the child to earn an average score because errors are on later-developing sounds
- Child earns a low GFTA-3 score

The child does not produce later-developing sounds in any of the words tested. When examining the emergence data, a boy his age or younger were able to produce these sounds correctly in one or more instances. Intelligibility may be fair to good, however, he was unable to imitate the sound correctly, which is a poor prognostic indicator that he will learn to produce the sound correctly without additional support (e.g., home, classroom, direct therapy).

## Explaining test results to administrators

- Administrators/district requirements for “academic impact” needed to provide services
- Administrator view of academic impact does not match clinicians’ view of need for services

The student does not produce the sounds *r*, *s*, and *th* in any of the words that were tested. He was unable to imitate these sounds correctly, which is a poor prognostic indicator that he will learn to produce the sound correctly without additional support.

The student’s errors negatively impact intelligibility, so that teachers have difficulty understanding his oral responses in class. Teasing from peers has resulted in him becoming more withdrawn, significantly reducing his participation in the classroom.

## Explaining test results to funding entities

- Funding entity requires a standard score of 77 to fund services (e.g. insurance, Medicaid)
- Child earns a GFTA-3 score of 78
- Clinician's recommendation is that the child receive direct services

The child's results from a comprehensive assessment of articulation shows her articulation skills to be at the very low range of ability. She incorrectly produces 13 speech sounds, which significantly reduces intelligibility. The percentile rank on the GFTA-3 places her at the 9<sup>th</sup> percentile. Stimulability (the ability to imitate correct productions of sounds) was poor (she was stimulable for 5 of 13 error sounds, indicating a poor prognosis for spontaneous improvement of sound productions without intervention).



143

## Stakeholder does not accept your recommendations based on assessment results

- Document all test results and considerations to support your recommendations for the student
- Norms cannot be "adjusted" to meet ever-changing legislative, district, and insurance requirements for a students' eligibility for services.
- Consider/offer recommendations for alternatives to direct treatment
  - monitor child and retest in X months
  - consultation in classroom
  - home practice
  - articulation lab in classroom



144

