**Implementing a Phonetically Consistent Approach to /r/ Remediation**

*R Strategies that Work*

SAY IT RIGHT.

Christine Ristuccia, M.S., CCC-SLP

---

Are you feeling frustrated about R?
… You are not alone!

---

**Presentation Overview**

- This presentation is targeted for intermediate level of knowledge

- Research review

- Evaluation procedures

- Specific treatment strategies

- Multi-media: Video and case studies.

---

The job of a SLP can be exciting and challenging

---

Every SLP faces challenges when evaluating & treating children with /r/ misproductions

---

Traditional strategies of using Initial, Medial and Final /r/ add to the challenges of the SLP

---

## The Traditional Approach to /r/

One of the main sources of frustration is that /r/ has been treated primarily for its *consonantal qualities* while *ignoring* the more complex *vocalic qualities* or grouping all of the vocalic /r'/'s into one category entitled **vocalic /r/.**



Using a phonemic approach to /r/ remediation will greatly assist you in meeting the needs of your students
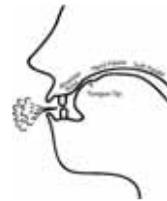
My first year out of graduate school, my supervisor gave me all of her students with R problems…



## /R/ Is different From other phonemes

There is no consistent placement as there is for other phonemes

(e.g. /t/ or /s/, alveolar ridge).



## The lack of a comprehensive remediation strategy has four primary causes:



**General misunderstanding**

**Incomplete remediation materials**

**No general accepted method**

**Deficiencies in education**

## Correcting the R sound is challenging because…The Supporting Research

R can be produced many ways.
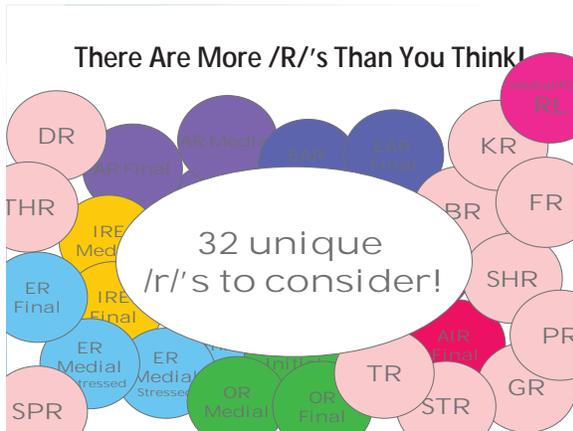
Surrounding vowels and consonants often affect the manner and place of production for R.

References:

Bernthal, J.E., & Bankston, N.W. (1993). *Articulation and phonological disorders.* Englewood Clifts, NJ: Prentice Hall.

Clark, C.E., Schwartz, I.E., & Blakely, R.W. (1993). The removable r-appliance as a practice device to facilitate correct production of /r/. *American Journal of Speech-Language Pathology, 2*(1), 84-91.

Elbert, M., & McReynolds, L.V. (1975). Transfer of /r/ across contexts. *Journal of Speech and Hearing Disorders. 40,* 380-387.

Shriberg, L.D. (1975). A response evocation program for /ɚ/. *Journal of Speech and Hearing Disorders, 40,* 90-105.

Shriberg, L.D. (1980). An Intervention program for children with persistent /r/errors. *Language, Speech and Hearing Services in Schools, 11,* 102-110.

## There Are More /R/'s Than You Think!

32 unique /r/'s to consider!

DR, THR, ER Final, ER Medial Stressed, SPR, AR Medial, AR Final, IRE Medial, IRE Final, ER Medial Stressed, Initial, OR Medial, OR Final, TR, STR, EAR, EAR Final, AIR Final, GR, PR, BR, FR, SHR, KR, RL

---

Some students can produce one R controlled vowel but not another due to the changing nature of the sound.

The phoneme /r/ in the word "CAR" (/ar/ final) is pronounced differently from the word "FOR" (/or/ final) or the word "BUTTER" (/er/ final).

However, the final /r/ phoneme in the word "ANCHOR" is pronounced the same as the /r/ phoneme in the word "BUTTER." This is because they are both phonetically /er/ final words despite the spelling differences.

---

## R can be divided into three categories.

1. Prevocalic, Initial or Consonantal R
2. Vocalic or R-controlled
3. Consonant Blends
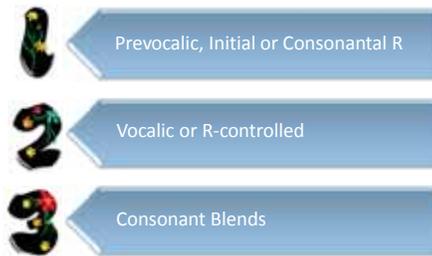
Few standardized measures fully assess vocalic R.

---

## Hierarchy of Prevocalic /r/ Words (retracted to rounded vowels)

| |
|---|
| reef |
| red |
| Rick |
| Roy |
| rug |
| raft |
| rock |
| round |
| roof |
| rain |
| ride |

---

## Overview of Vocalic R's

| [er] | [or] | [ar] |
|---|---|---|
| Ernie | Orville | Archie |
| buttercup | corn | barn |
| feather | four | star |
| [air] | [ire] | [ear] |
| Erin | Ireland | Erie |
| ferry | fire | cereal |
| fair | fireman | deer |

---

## Overview of R Blends

| PR | BR | TR |
|---|---|---|
| Pride | Brought | Tried |
| Pretty | Brown | Tree |
| **DR** | **FR** | **KR** |
| Drain | Frog | Crash |
| Drum | Friend | Cry |
| **GR** | **SHR** | **STR** |
| Great | Shrug | String |
| Green | Shrink | Street |
| **SPR** | | **THR** |
| Spring | | Thread |
| Sprint | | Three |

## The traditional approach to articulation therapy focuses on correcting one sound at a time.

(Van Riper, 1978)

L ➡ S ➡ R ➡ TH



Word
Phrase
Sentence
Conversation

Sound
Establishment
Acquisition

Sound in Isolation

## Comparison of Approaches:

| Initial Position | Medial Position | Final Position |
| --- | --- | --- |
| ribbon | barefoot | car |
| run | buttercup | fear |
| rain | thorn | four |
| race | wireless | butter |
| ring | barn | software |

*Traditional Approach*

*versus*

| Initial AIR | Medial AIR | Final AIR |
| --- | --- | --- |
| Arizona | dairy | millionaire |
| Erin | ceremony | square |
| heiress | haircut | scare |
| arrowhead | barefoot | tear |
| aerosol | stairs | pair |

*Phonetically-Consistent Approach*

## Utilizing Traditional Approach to /r/ Probe Lists

- Does not account for each unique /r/ phoneme.

- Some words have recurrent /r/'s.

- Phonetically inconsistent probe lists for production training.

- Probe lists were compiled by spelling of word.

## Practice saying traditional /r/ approach practice words lists with your neighbor

### Traditional Approach Probe List Sample

| Initial | Medial | Final |
| --- | --- | --- |
| Ribbon | Barefoot | Car |
| Run | Buttercup | Fear |
| Rain | Thorn | Four |
| Race | Wireless | Butter |
| Ring | Barn | Software |

## Practice saying phonemically consistent words with your neighbor

### Phonemic Approach

| [or] Initial | [or] Medial | [or] Final |
| --- | --- | --- |
| Orville | Award | Snore |
| Ornament | Export | Adore |
| Organ | Fork | Core |
| Orient | Board | Floor |
| Oriole | Worn | Soar |

## The traditional approach has not proven to be very effective when evaluating and treating R.

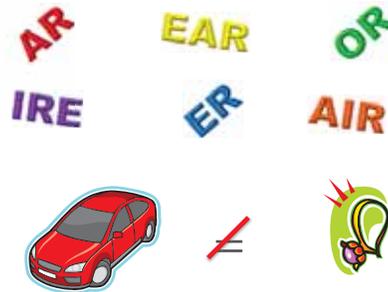## What is the solution?

## The solution is to treat R Phonetically!

## Benefits of using a phonetically-based approach:

o **Evaluates**
all variations of R

o **Provides**
a starting point for treatment

o **Targets**
individual needs

o **Reduces**
time in therapy

o **Measures**
student progress

## The phonetically-based approach evaluates all of the many variations of R.

AR   EAR   OR
IRE   ER   AIR

Oral positioning will vary for each post-vocalic R.

## 21 Types of R (not including blends)

| | | |
|---|---|---|
| /air/ Initial | /air/ Medial | /air/ Final |
| /ar/ Initial | /ar/ Medial | /ar/ Final |
| /or/ Initial | /or/ Medial | /or/ Final |
| /ear/ Initial | /ear/ Medial | /ear/ Final |
| /ire/ Initial | /ire/ Medial | /ire/ Final |
| /er/ Initial | /er/ Medial Stressed | /er/ Final |
| Prevocalic /r/ | /er/ Medial Unstressed | /rl/ Medial & Final |

## Visual Rs are Easier to Teach

Words containing visual Rs:

artist    Ireland    fire

Words containing non-visual Rs:

shirt    world    girl

## Question Your Current Method of Treatment and Evaluation:

- Evaluate all variations of /r/ in all word positions?
- Establish/use natural tongue production?
- Remediate only the misproduced /r/ allophones?
- Choose targets based on students' **individual** needs?

## Start With a Comprehensive Evaluation

- Evaluate **ALL** vocalic /r/ allophones in **ALL** word positions to attain a comprehensive understanding of student's individual present level of performance.
- Evaluate prevocalic /r/ (red) in combo with all vowels and all initial /r/ blends (e.g. bread).

## Why Evaluate /r/ in a Comprehensive Manner?

- To find a starting point for treatment. Research shows that *almost all students can produce at least 1 type of /r/.*
(Curtis & Hardy, 1959; Ristuccia, 2005).

- Pinpoint exactly where to begin therapy according to your student's **individual** needs.
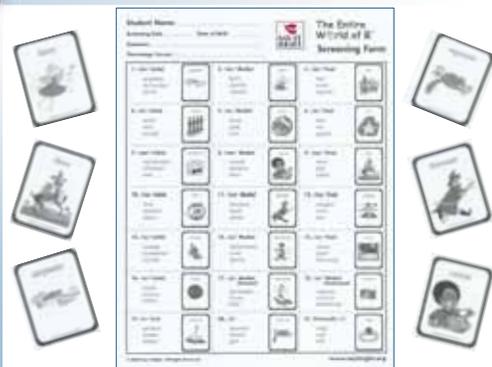
## Phonetically Consistent Probes are Different from "Traditional" Approach Probes



## There are 2 Screenings Available to Help You with your R Evaluations:



## The Entire World of R Screening Form

## The Advanced Screening Tool for R

## How to decide which tool to use:

21 Word Screening Tool | Advanced Screening for R

- Most Rs are correct
- You have limited time
- No Rs are correct on the 21 Word Tool
- You have 2 or more possible targets
- The student can't read
- Interfering disorders are present
- The case is particularly challenging
- You want more information
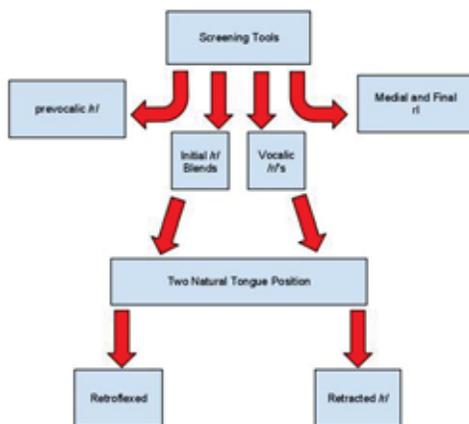
## There are 2 Ways to Teach the /r/

Retroflexed          Retracted

## Why Establish Natural Production?

- To know which verbal cues and hand signals to use as your starting point.
- To use what the student's tongue does **naturally** to increase kinesthetic awareness of tongue placement.
- Wrong tongue position can lead to distortion of /r/ productions.

Establishing a student's natural production for R is important because it...

1. Encourages effortless, correct productions.
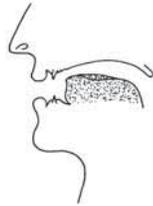2. Reduces time in therapy.
3. Increases effectiveness of practice.

## Natural Tongue Position is CRITICAL!

- "Easy not hard"

- Leads to kinesthetic awareness = Carryover

## "Teaching" /r/

Teaching /r/ in a unnatural manner is . . .

. . . equivalent to teaching a child who is right handed write with the left hand

## Establishing Natural Production Example: Brock

## How to Determine Productions of /r/

- Instruct the child to say one of the correctly produced /r/ words. Then ask, what is the tongue doing?

- Use his productions to determine his natural production of /r/: *retroflexed* or *retracted*.

## Kinesthetic Tongue Awareness

- When producing /r/ it is important for student be able to feel what the tongue is doing.
  - Mountain vs. Backward C
  - Tight vs. loose
  - Up vs. down during productions
- We need the student to be focused on feeling the mouth (body) vs. in their heads/thinking about the mouth.
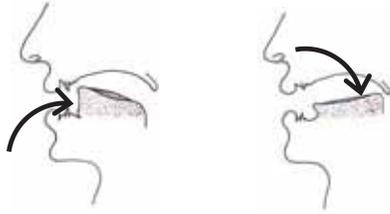
## How Do You Know Which Type of R to Teach?

Retroflexed          Retracted

## Productions for R



Retroflexed        Retracted

Words such as *art*, *or*, and *orchid* are highly visual.

## When to Instruct Retroflex versus Retracted



## Help! What if my student can't say any of the Rs on the Advanced Screening Tool?
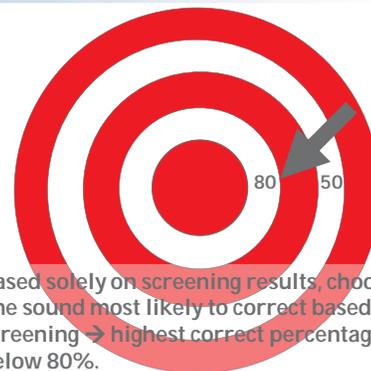


## Administer all sections of Elicitation Probe until a successful prompt is found



## There are 2 variations of EWR Elicitation



## Choosing an Intervention Target: Method 1



Based solely on screening results, choose one sound most likely to correct based on screening → highest correct percentage below 80%.

Transfer Advanced Screening Results Choose Baseline Results Page



## Choosing a Target Checklist



## Target Options Worksheet



## Choose One Target and Stick With It!

- Why?  Ensures student/SLP knows goal
- Allows for generalization
- Measureable progress (Ristuccia, 2005)
- Kinesthetic awareness of tongue position.

## Goal for Choosing a Target

- Work with students correct productions
- Consistent production probe lists
- Increase students kinesthetic awareness of what her tongue is doing during correct productions.

*Student success is Priority:*  If student is not successful,  choose another target or re-administer the Advanced Screening or administer the Elicitation Probe.
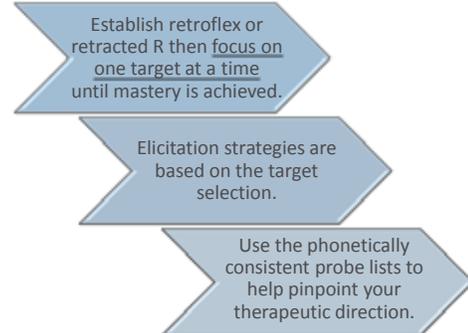
## Which target do you choose? Why?

Intervention

    Target =

        Students success

## The EWR Approach #1 is based on establishing what the student does most naturally.

Establish retroflex or retracted R then <u>focus on one target at a time</u> until mastery is achieved.

Elicitation strategies are based on the target selection.

Use the phonetically consistent probe lists to help pinpoint your therapeutic direction.

## Screening /Target Selection-Method 1 Review

- Adminster EWR Advanced Screening
- Fill in Baseline Results page.
- Take results and write out possible target options (Target Options worksheet page)
- Choose a target based on:
  - Elicitation techniques
  - Percentage correct

## Write a treatment Goal for [AR] final

- Sample IEP Goal:

- Sample Working File Goal:

## Treatment Goal Sample

**Sample Goal:**

*Alex will produce [ar, or, ire, and ear] with 80% accuracy at the sentence level for 5 consecutive sessions.*

**Sample Working File Goal (s):**

*Alex will produce [ar] initial, medial & final word positions with 80% accuracy for 5 consecutive sessions. [ar] final will be the first target followed by [ar] initial.*
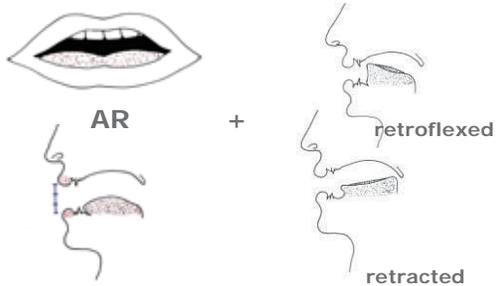
## Utilize Phonetically Consistent Probe Lists for Production Practice (Method one)

- AR visual teaching tools
- AR auditory environmental sounds.
- AR initial single word probe lists
- AR initial phrases
- AR initial sentences
- AR initial stories
- AR Mixed complexity practice

## AR Visual Teaching Tools



## Isolation



## Using the Pirate Sound

ARCHIE'S ART

Review the following words:

Arden        Arion        artist

Archie       arcade       art

arm-in-arm   armful

Tim and Arden lived in the town of Acton. One day, they walked downtown and saw Archie, the cat, playing with some art supplies that someone had lost. Both Tim and Arden picked up an armful of pallets and paints. In town, the artist saw them and gave them some money because they had found his art supplies. Then, Tim and Arden went to the arcade and spent the money on games and snacks. Finally, Tim and Arden went home arm-in-arm, happy to have had such a fun day.

With what was Archie the cat playing? _____

Who gave them money? _____

What did Arden and Tim do with the money? _____



played arcade games

Armando, the architect,    ate artichokes    in Armen's Kitchen.

## Why focus on one sound and word position at a time?

- Provides consistent practice & repetition.
- Enhances ear training/motor planning.
- Ensures student/SLP knows goal.
- Allows productions of other misproduced /r/ allophones not yet targeted in therapy to generalize.
- Document student progress.

## The Phonetically Consistent Approach-Method 1

Consistently focus on one target at a time until mastery.

Matches elicitation techniques to target.

Utilizes phonetically consistent word lists for production training.

## Case Study #1: Matthew (Method 1) Verbal

- Matthew
- 10 year-old 5th grader
- Mispronounces his /r/'s
- You conduct Advanced Screening....

Verbal Review

## Matthew Results-Baseline Results Page



- Student uses retracted /r/.
- Successfully produces all initial /r/ blends

## What targets are options for Matthew?



- [ar] Final 66%    - [or] Final 77%
- [ire] Medial 66%  - [ire] Final 66%

## Matthew's goals



**IEP Goals** Matthew will produce [ar], [ire], and [or] with 80% accuracy over 5 consecutive therapy sessions as measured by SLP tally and probe test.

**Working File Goals** Matthew will produce [ar] initial, medial, and final word positions with 80% accuracy over 5 consecutive sessions. [ar] final is the first target followed by [ar] initial. Matthew will open his mouth wider during [ar] productions.

## Evaluation Review

**Goal:** To find a correct production

- Using the correct production establish whether the students naturally uses a retroflex vs. retracted /r/.

- Choose an appropriate target within the same sound family in which the correct word was produced.

## Review: Evaluation and Target Selection

- Evaluate all variations of /r/.

- Interpret the evaluation results.

- Choose one intervention target by determining allophone with highest chance of improvement.

- Write goals and objectives.

## How to Utilize /r/ Elicitation Techniques

- Used with EWR-Method One

- Analyze screening results to determine the appropriate technique.

- Learn how to use various techniques with <u>specific</u> word positions.

- Choose target on possible elicitation technique that could be used.

## Overview of Our Favorite Techniques

Cueing
Cognate Pairs
Coarticulation
Whisper Technique
Prevocalic R
Single vs. Multi-syllabic words
Nonsense Words
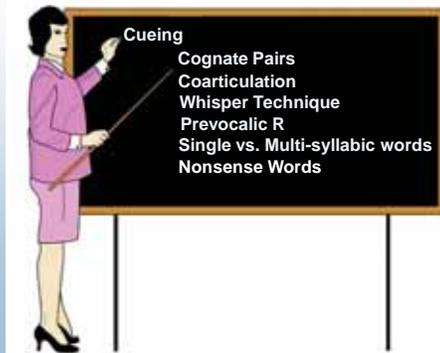
## Coarticulation

Works best with a correctly produced final word and a misproduced initial word (or vice versa)

Review baseline screening results page

Use student's success in one word position to help shape the other misarticulated word positions (e.g. car art).

**Technique:** Have student produce one word and hold tongue in the same position, then produce the next word.

## Coarticulation

car + art

ERnie → teachERnie → teachER

teachER → teachERnie → ERnie

## Coarticulation

ER Screening





Clover   Earth

## Use Prevocalic /r/ to Elicit a Misproduced /r/ Allophone

A successfully produced prevocalic /r/ can be used to shape other /r/ variations.

*Example:*  *ear red*

slowly fade out *red*.

## Using the Whisper Technique

The whisper technique consists of combining two words together.

Combine a misproduced [ar] final word (*car*) with successfully produced [ar] initial word, (*art*)

*car + art*

## Whisper Technique

Most often the whisper technique is used with coarticulation but it may also be used alone.



bak**ER**y ➡ bak**ERY** ➡ bak**ER**

## Using the Whisper Technique in /r/ Therapy

■ The whisper technique consists of

Combining two words together

Example: Mis-produced ar final word such as: car

Combine car with successfully produced art
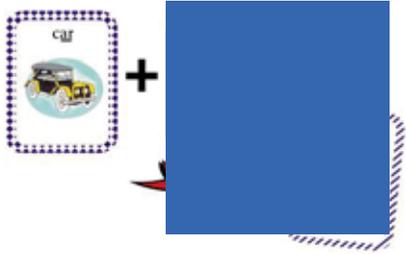
## Whisper Technique



## Whisper Technique Example: Blake

## Whisper Technique Example: Chase

## Gradually fade the cues as soon as the target is consistently produced using the technique.



## When Prevocalic /r/ is an Ideal Target

Student is substituting w/r or lip rounding for

- Prevocalic /r/
- Initial /r/ blends

## Remediation of (Prevocalic /r/)

Have student use a **mirror** so that she can see her own mouth. This is important to eliminate any lip rounding and ensure that the student is producing both the /r/ plus the vowel.

## Cueing Example: Jordan

## This is an Example of a Prevocalic /r/ Production Practice Session
### Target: /r/ + /i/

- **Single Words**
  - *reef, read, remind*
- **Phrases**
  - *The reef*
  - *Love to read*
  - *Please remind*
- **Sentences**
  - *We saw reef in the ocean.*
  - *I like to read.*
  - *Please remind me to eat.*

## Prevocalic R Example: Jordan

Gradually fade <u>All Elicitation cues</u> as soon as the target is consistently produced using the technique.



## The EWR Approach #2 is based on establishing Kinesthetic Awareness

Further probe and determine successful /r/ + consonant/vowel combinations for a given target.

Goal: To establish kinesthetic awareness to increase carryover

Use the phonetically consistent probe lists to practice correct productions

## Benefits of Utilizing the Elicitation Probe

- Practice specific successful productions
- Obtain Kinesthetic awareness
- Address the specific vocalic /r/ + consonant that is misproduced
- Address the specific prevocalic /r/ + vowel that is misproduced
- You can choose the specific probe list that the student needs.
- Leads to Carryover of mixed words with a particular allophone.

## There are 2 variations of EWR Elicitation Probe



## Raphael Video-Elicitation Probe Prevocalic /r/



## Why Utilize EWR Elicitation Probe

| | | | |
|---|---|---|---|
| Deeper probe after initial evaluation | Evaluates vocalic /r/ in combo with each consonant | Analyze successful productions | You have 2 or more possible targets |
| Evaluates prevocalic /r/ with each vowel | Helps with kinesthetic awareness | The case is particularly challenging | Assists in deciding production probe list |

## Elicitation Probe—Prevocalic /r/



## Raphael: [ear] + Palatals Production Practice

19

## Interpreting the Elicitation Probe

Look for patterns of correct and incorrect productions

A useful pattern is to identify differences between voiced and voiceless cognates

Example: student can produce ARP but not ARB

Vertical and horizontal patterns often help you find facilitating contexts for various R variations

## Use The Elicitation Probe to Find Patterns



## Voiced versus Voiceless Cognates



### Great / Crate

**Arp vs. arb**

## Voiced vs. Voiceless Cognates-/r/ blends



cry   crib
crayon
**K**

grape
grin  green
**G**

Voice Off        versus        Voice On

## How to Evaluate Voiced vs. Voiceless Cognates

Probe for vocalic/consonantal and consonantal/vocalic combinations for a target allophone. (Elicitation Probe).

| | |
|---|---|
| orp/orb | por/bor |
| ort/ord | tor/dor |
| ors/orz | sor/zor |

## Phonetically Consistent Probe Lists:

## Physical Characteristics of the Chronic Students-Visual Observations

- Jutting head forward
- Poor posture
- Unusual facial expression (rolling eyes)

## Auditory Observations of Unnatural Tongue Position

- Glottal fry
- English Accent
- Sounds as though student is swallowing his tongue

## High Anxiety Levels Could be Caused by Unnatural Tongue Position

- Important to try an alternative tongue position
- Anxiety levels
- Talk about feelings and thoughts about /r/ therapy to discover reasons for anxiety.

## Neck and Shoulder Tension Release Set

## Case Study #2:

- Dustin is a 3rd grade boy. He has been in speech for /r/ for 2 years.
- Physical Characteristics noted:
  - Received OT and PT prior to transferring.
  - Awkward gait.
  - Talks incessantly.
  - Needed constant reminders to wait to take his turn.
  - Extremely anxious and impatient when attempting to produce his /r/'s.

## Dustin's Screening Results

## Dustin's Treatment Plan

- Individualize session to evaluate and try alternative tongue position .

- Discussed deep breathing (inhale/exhale) and visualization (beach – his idea) for relaxation. (in his body vs. his mind).

- Talked about not expecting perfection, but doing our best.

## Case Study #3: Trevor

- Trevor is a 3rd grade student, who has been in speech for /r/ for one year.

- The previous SLP taught all her students the retroflexed /r/.

- Not successful in a group of 3 students.

- When working individually, he broke down in tears saying he was trying his best, but would never be able to say /r/.

Verbally review

## Trevor's Screening Results

The Entire World of R™
**Advanced Screening Results**

## Trevor's Screening Results

- Even though screening and probe result looked similar, he was stronger with [ear].

- Trevor's natural tongue position is retracted.

## Trevor's Treatment Plan

- Educate Trevor about his natural tongue positioning. Train & remind. Increase kinesthetic awareness.

- Use [ear] initial probe words. Alternate between nonsense (single words, phrases and sentences) and real words.

- Yoga breathing. Use neck tension set.

## Trevor's Working Goal

- Get Trevor to produce the [ear] initial sound in single words, phrases and sentences.

- Intermittently try the co-artic and whisper techniques to get the medial and final word positions.

## Trevor's Treatment Plan

- Move to [ear] initial words; use worksheets or cards.

- Alternate between levels of complexity (randomized practice).

## Trevor Sample Session

- Warm-up: Try a word.

- Tongue positioning (review).

- 3 syllable words (easier).
  *serious, period*

- Review what he's doing.

- Nonsense words (easier).

- Sometimes sentences & phrases are easier than single words.

- Make one syllable words into 2 syllables.

## Mikie

Beginning of 6th grade year, 5 years of therapy for R, 3 SLPs

Straight A student who was embarrassed by his speech but made light of it in public

4 SLPs for R by middle school

Father told that structural abnormalities were preventing Mikie from saying R

Mikie also worried that there was something physically wrong with him

## Initial Screening of Mikie

## Overview of Mikie's Results



## Therapy with Mikie: One Hour Later

## Eligibility involves more than simply making good grades in school.



These statements may also apply if your district is using a Response to Intervention (RTI) service delivery model.

## Grant

8th grade; involved with the National Honor Society and played many extracurricular sports

5 years of therapy for R, 3 SLPs; IEP goals included Prevocalic R, EAR, and AIR

Significant avoidances tendencies were impacting academics, friendships, and future career aspirations

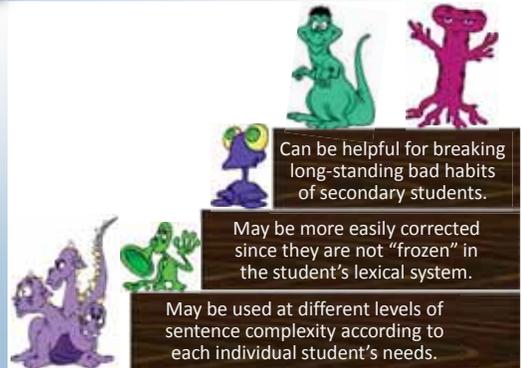School speech therapy services had already been discontinued due to previous lack of success

## Grant Interview

## Nonsense Words

Can be helpful for breaking long-standing bad habits of secondary students.

May be more easily corrected since they are not "frozen" in the student's lexical system.

May be used at different levels of sentence complexity according to each individual student's needs.

## Tenets of the Phonetically Consistent Approach

- Evaluate all of the vocalic allophones of /r/, prevocalic /r/ and initial /r/ blends.
- Differentiate between correct and incorrect productions.
- Choose target according to student's **individual** needs.
- Only target specific misproduced /r/ allophones.
- Use student's correct productions to elicit incorrect productions.

Is a phonetically consistent /r/ approach utilizing method one effective?

## Phonetically Consistent Approach to /r/ Study

- Conducted in a naturalistic environment (elementary and middle school).

- Practicing SLP's collected the data and administered evaluation and treatment procedures.

## San Diego Unified School District study supports using a phonemic approach to treat R (2005)
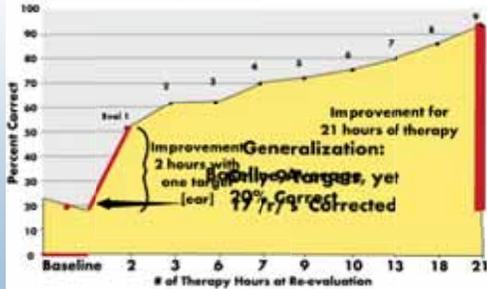
- 31 students aged 6-14 years

- Tracked for 6 months

- Single subject design

- Two baselines screenings per student

San Diego Unified School District study supports using a phonemic approach to treat R (2005)

- Between 15 and 20 hours of treatment

- Method was to treat a single target until 80% accuracy achieved at the sentence level for 5 sessions.

Study Screening

- Very specific – Evaluated single words, phrases, and sentences for 32 different types of /r/.

- Provided correct percentage for each sound and word position. Allowed for easy determination of performance.

- Enabled researcher to logically choose intervention targets.



Composite results of all 31 students' productions at the baseline screenings



Chart shows composite percentage correct for each vocalic /r/ allophone (21 vocalic /r/'s)

Improvement by overall percentage from baseline to end for all 31 students



Start and ending errors by total number of incorrect /r/ allophones for all 31 students
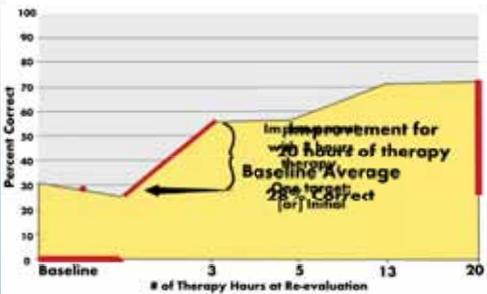
**Student Sample I:**
Improvement % by # of hours of therapy



**Student Sample II:**
Improvement % by # of hours of therapy
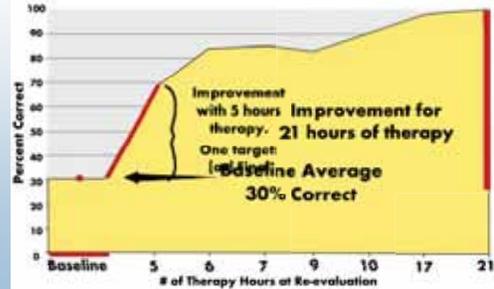


**Student Sample III:**
Improvement % by # of hours of therapy



## Study Results

- 80% of students corrected 5 or more R variations
- 58% ended with 3 or fewer errors
- 7 students were dismissed

Study findings support the No Child Left Behind Act and help add accountability for your student's R therapy goals.

## No two students were exactly the same…

…but all made progress.
100% of students generalized /r/ allophones!

## SLPs in study had common feedback

- Screening proved to be an excellent tool to determine present level of performance.

## Review: Reasons for using a phonetically consistent approach

- Better understanding of the complex nature of /r/.

- Measurable progress for students.

- Decrease in caseload size!

- Evidence-supported method which adds accountability for yourself, parents and school staff.

## Organization of an /r/ Therapy Session

- Review kinesthetic awareness.

- Review tongue position.

- Review previous session's target.

- Practice production training with specific /r/ + successful consonant.

- Production training with specific allophone with mixed consonants.
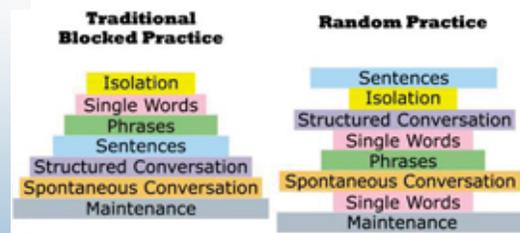
## Tips for Working with /r/ Groups

- Attempt to schedule all /r/ students together.

- Treat each student/allophone separately. Each student will have own treatment plan tailored to their specific needs.

- Schedule difficult kids together (similar issues).

- Make time to see a student alone if not making progress in a group setting

## Blocked vs. Random Practice



**Traditional Blocked Practice**
- Isolation
- Single Words
- Phrases
- Sentences
- Structured Conversation
- Spontaneous Conversation
- Maintenance

**Random Practice**
- Sentences
- Isolation
- Structured Conversation
- Single Words
- Phrases
- Spontaneous Conversation
- Single Words
- Maintenance

(Motor learning theory, Skelton, 2004)

## Tactile-Kinesthetic Movement



## Appropriate Homework

- Stage 1: Practicing natural tongue positioning (retroflex vs. retracted /r/) to gain kinesthetic awareness.

- Stage 2: Send home words that the student can consistently produce perfectly in therapy.

## Ways to Measure Student Progress:

- Briefly review previously mastered targets to check for retention.
- Use advanced screening tool to collect current data and evaluate direction of therapy.
- Use Daily Data Collection and Daily Tally Sheets to measure progress day to day.

## In Public Schools Working with Groups is a Reality

- Attempt to schedule all /r/ students together.



## Reasons for Lack of Progress: Chronic /r/ Students

- Traditional approach was taught with lack of target/wrong target.
- Student taught incorrectly (er red, er run)
- Student taught unnatural tongue position.
- Speech has become <u>effortful</u>.

## Dismissal Criteria

- When students can produce all /r/ allophones with at least 80% mastery at the sentence level.
- When students, parents, and teachers report it is no longer a problem.
- When articulation needs can be addressed at home or in the classroom.

# Questions?

## Handout & References

www.sayitright.org/resources