Achieving “R” ticulation

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Financial Disclosure Statement

Relevant Financial Relationships

- I am the President of Artic Bites, LLC
- I am the inventor and patent holder of the Bite-R.

Relevant Nonfinancial Relationships

- I am the author of the Manual, *Tactile Therapy for the Remediation of the R sound* The therapy concepts are mine.

Agenda:

I. What do we need to make a correct R sound?
II. Tactile Devices
III. How Tactile Therapy is used to help the R sound
IV. Analyzing Words (How do we know what to do in therapy)

Learner Outcomes

1. The learner will be able to determine the effects of an incorrect tongue tension and incorrect lip, jaw and tongue placement during speech production.

2. The participant will be able to determine the movement needed to correct the disordered R.

3. The learner will review a variety of tactile tools in order to be a better consumer of therapy devices.

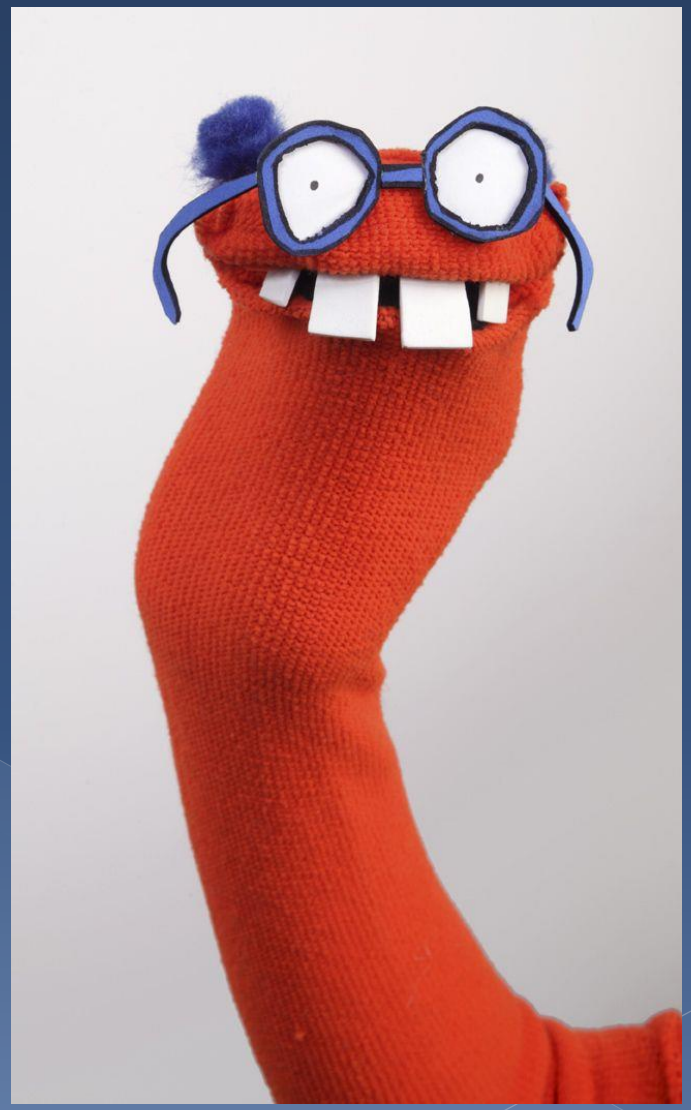
Does working on the R sound make you want to run away?

What are the characteristics of children with R disorders?

Sound Errors

w/r wabbit
uh/er teachuh
oh/er teachoh
ow/ar cow/car

Puppet mouth



Skill Deficits

Inconsistency

They can produce the R clearly in the speech room and then stand up to leave….NO R!

Perception issues

They don't recognize that their sounds are incorrect but can recognize the mistake if you produce it.

Some Research about R

- Schuster 1998-

- Perception of /r/ found that when children's productions were edited to make the /r/ correct, children were not able to perceive their own /r/ as correct.

Imitation skills

They can't imitate volitionally.

How do we work with kids who can't…?

* feel the location of their own tongue
* see our tongue once the teeth are closed
* imitate the sound
* perceive the accuracy of the R
* inconsistent in accuracy

Eliciting versus Maintaining

Sources for Eliciting using Traditional Therapy

- Kuster, Judith https://www.mnsu.edu/comdis/kuster2/therapy/rtherapy.html

- **Eliciting Sounds: Techniques and Strategies for Clinicians** 2nd Edition by Wayne A. Secord (Author), Suzanne E. Boyce (Author), JoAnn S. Donohue (Author), Robert A. Fox (Author), Richard E. Shine (Author)

What does it take to elicit an R?

Position of the Articulators for R

Tip Up R (Retroflex)

Lips:
Slightly protruded

Jaw:
Almost Closed

Tongue:
Body of tongue raised and the tip is curled upwards but the bottom of the tongue tip is not in contact with the alveolar ridge

Position of the Articulators for R?

Back R (Retracted)

Lips:
Slightly protruded

Jaw:
Almost Closed

Tongue:

Tongue back lateral edges raised with a groove down the center of the back of the tongue.

Boyce and Schmidlin, 2008
Using Ultrasound with Therapy for Resistant /R/

21 ***different*** tongue positions for a correct /r/.

Boyce and Schmidlin, 2008

Using Ultrasound with Therapy for Resistant /R/

All r's have (at least) three constrictions:

Pharynx

Lips

Somewhere along the palate

What do studies suggest we need for an R

Byun and Hitchcock, 2012

Investigating the Use of Traditional and Spectral Biofeedback Approaches to Intervention for /r/ Misarticulation

To rule out the effects (collectively of previous therapy,)they taught artic of /r/ in a 4 week stretch to decrease cognitive load.

Week 1

American /r/ is typically produced with rounded lips (Bernhardt & Stemberger, 1998)

Week 2:

Tongue tip placement taught by dragging the tongue tip backward along the alveolar ridge. (Shriberg 1975).

Week 3:

Jaw stability (Shriberg, 1980)

Week 4:

Produce /r/ with high level of tension (Delattre & Freeman, 1968)

Week 5/6:

Used to integrate all of the movements

Freedman, Maas, Caligiuri, Wulf & Robin, 2007

Found that speech performance is more accurate and less variable when an external focus of attention is adopted. (motor movement)

Maintaining the sound production

- Once you teach the R, it can be difficult to get carryover.

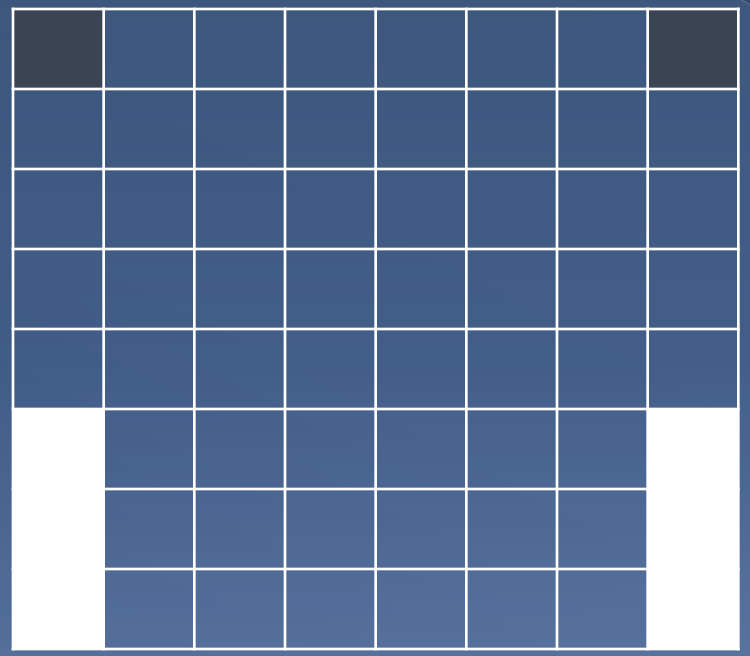
Maintenance may be due to lack of stability

McLeod,Sharyanne, (2009, November) Speech Language Pathologist's Knowledge of tongue/palate contact for speech sound assessment and intervention. American Speech Hearing Association, New Orleans.

240 SLPS in Australia

- Most had never seen or used electropalatography
- Asked to show on a graph where their tongues were placed for speech sounds.

R



McLeod, S (2009, November) Speech Language Pathologists' knowledge of tongue-palate contact for speech sound intervention. Invited seminar presentation in *Clinical tools for representing speech productions: Transcriptions and beyond*. ASHA, New Orleans, USA.

What does this mean to my student?

- The student needs to have the placement and tension correct for the WHOLE tongue.

Our new mantra:

We want to teach the child their R…

Not the R we know how to teach.

Tactile Devices

What do I need to teach the child to feel their tongue position and the tension?
How can I get a tongue placement & tension along with the jaw placement/lip placement?
Does my student have the cognitive ability to follow instructions and answer questions?

An understanding.

- I am here to give you information so that you can become confident in your choices of therapy styles.
- I am not here to critique or to fully explain others' devices. I wouldn't want them to explain my device.

Myths about tactile devices

1) You don't need a speech pathologist.
2) The Device makes the R sound.
3) If the child can't make the R sound, the device isn't working.
4) Tactile Therapy is just non-speech oral motor therapy.

Tactile devices teach.
Depending on the device, you will get different teaching techniques.

Placement Tools

They are used WHILE the child speaks
They are manipulated in order for the clinician to movement the tongue to the desired place.

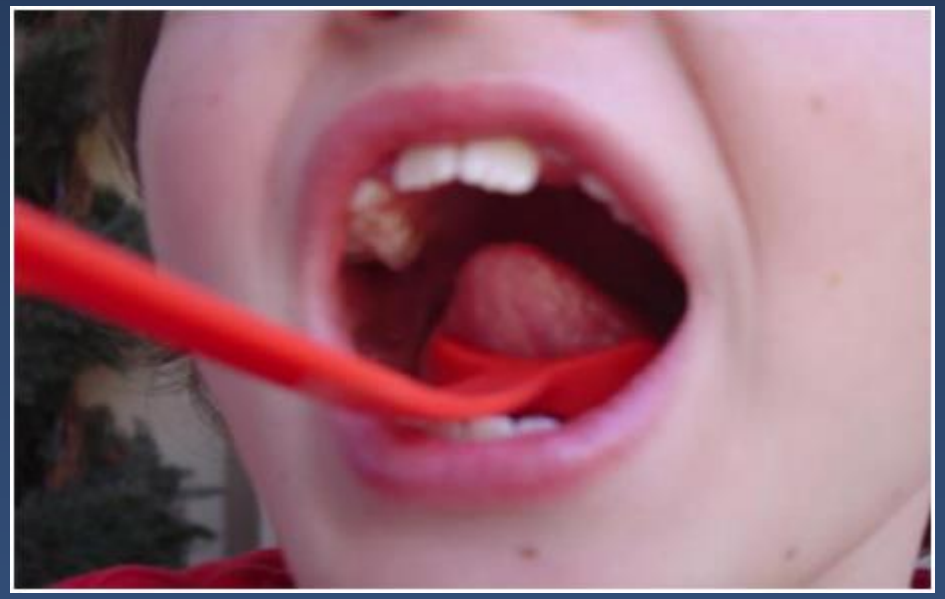
SPEECH BUDDY

- Website: www.speechbuddy.com
- Cost: $124 for a single use device
- Promises sentences in 4 hours of therapy.
- Provides videos and support online
- Device is used by SLP
- There are apps for r words
- Device is held by therapist while student talks with device in the mouth.

DEVICES

- 29.95 for a pack of three
- https://www.amazon.com/Tongue-LifteR-Pack-of-3/dp/B00JJU8AIQ
- https://www.johnsontherapeutic.com/product/tongue-lifter/

The LifteR



The LifteR

- From the website
- “Contoured cradle fully supports and lifts the tongue
- Angled handle for optimal lift and control
- More accurate than a tongue depressor – Save hours of therapy!”
- Single Client Use Device

Visual/ Tactile

Used while the child tallks.

The child is to watch the computer screen and move his/her tongue to the desired place.

DEVICES

- Up to $3,000.
- $89 a month to parents to lease
- http://completespeech.com/
- Parent support

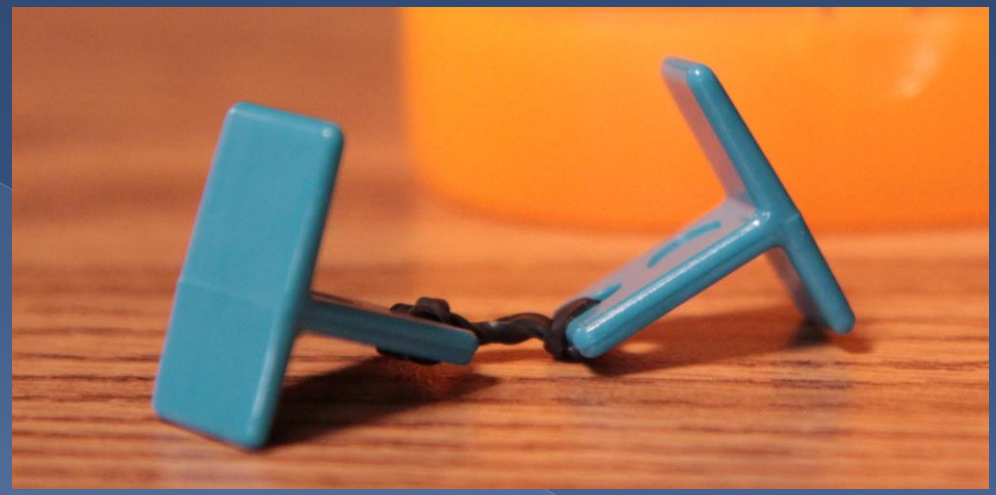
Smart Palate

Tactile- Tension Focused w/ Placement

Devices

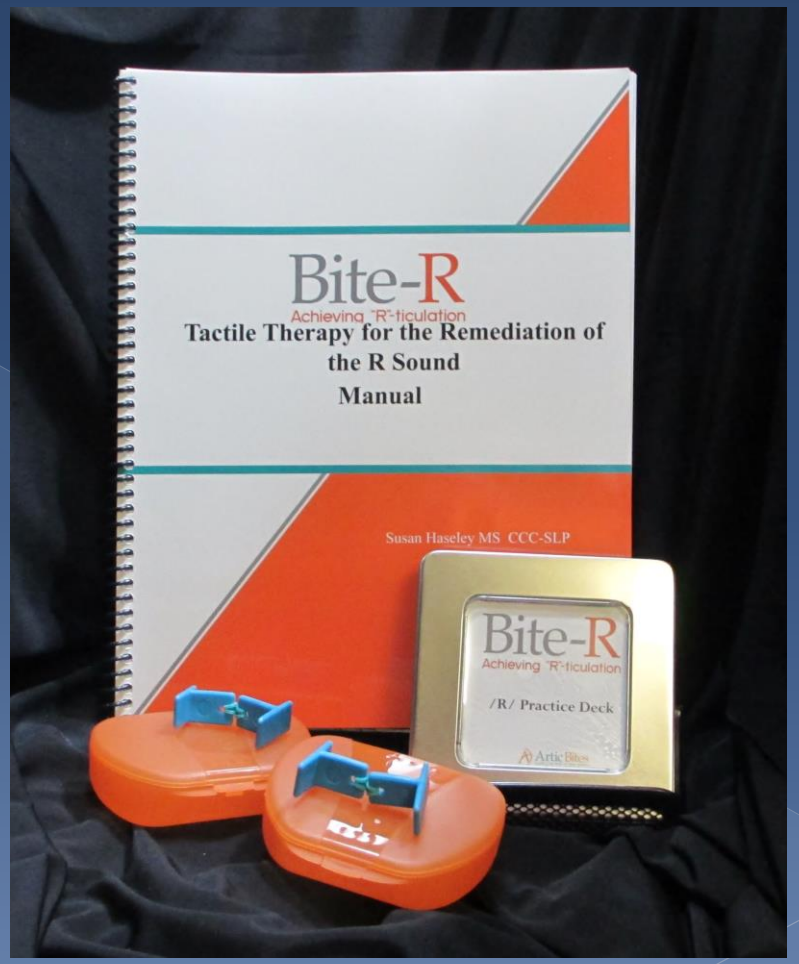
The Bite-R

- www.bite-r.com
- Single client use device
- No homework given
- No parent use
- Cost is $31.50/ single
- Start Up kit is $101.25
- Most students are able to improve on the first session.



Start Up Kit

The Bite-R



Tactile Therapy

The Basics

Tactile Speech Therapy is therapy in which the focus is on the motor movement of the tongue, lips, and jaw. The student is taught to describe the location, and position of the articulators, particularly when moving from one sound to another.

- Susan Haseley, author of Tactile Therapy for the Remediation of the R Sound, 2013

How Tactile Therapy differs from Traditional?

TRADITIONAL-phonemic

- Predominantly focused on sound imitation

TACTILE-movement

- Predominantly focused on creating tongue tension

How Tactile Therapy differs from Traditional?

TRADITIONAL-phonemic

- The child focuses on imitation

TACTILE-movement

- The child focuses on his/her lip movement, jaw movement and tongue movement

How Tactile Therapy differs from Traditional?

TRADITIONAL-phonemic

- The child is asked to "do it again" when he is unable to imitate.

TACTILE-movement

- The child is asked to tell what he did with his lips/jaw/tongue when he misarticulated

Self monitoring

TRADITIONAL- phonemic

- Self monitoring is taught later in therapy. Sometimes as late as the second or third year of therapy due to variability of skill levels from month to month.

TACTILE movement

- Self monitoring is taught first session
- Self monitoring includes a description of movement of lips, jaw and tongue

How can Tactile Therapy help my student?

- Sound Perception due to tongue awareness
- Tongue Placement and Tension
- Ability to repeat with modification specific to the word
- Ability to self-monitor from the first session
- Spontaneous carryover

F A Q ' s

- Do you talk with the Bite-R in the mouth?
- Which /r/ does the Bite-R teach?
- Can parents use this?
- What about homework?
- Do I have to put it in their mouths?
- Isn't this all just a form of non-speech oral motor therapy?

Disclaimer: The Bite-R will not help everyone. Like every product it is not a miracle.

Analyzing Words

Methods to Analyze:

- What do you do with your tongue, lips and jaw before and after the R for each of these words?
- Can You see/hear what the child is doing with the articulators that is different?
- Can you make the sounds the way they do?
- Can you make your /r/ near where they have their tongues?

LET'S MAKE THIS SIMPLE

WHEN AN R IS MISARTICULATED- THERE IS ALMOST ALWAYS ONE OR MORE OF 4 ISSUES INVOLVED:

jaw placement
lip placement
tongue placement
tongue/ mouth tension

Let's misarticulate

Get a partner (s)

Let's Say, "Read," Incorrectly

- Round Lip
- Flat Lips
- Tongue tip against lower gumline
- Tongue in a lower than usual "sh" position
- Tongue in the correct position but very lax
- Tongue tip elevated against the hard palate or alveolar ridge with the bottom of the tongue.

Let's Say, "Part," Incorrectly

- Round Lip
- Flat Lips
- Tongue tip against lower gumline
- Tongue in a lower than usual "sh" position
- Tongue in the correct position but very lax
- Tongue tip elevated against the hard palate or alveolar ridge with the bottom of the tongue.

Let's Say, "Girl," Incorrectly

- Round Lip
- Flat Lips
- Tongue tip against lower gumline
- Tongue in a lower than usual "sh" position
- Tongue in the correct position but very lax
- Tongue tip elevated against the hard palate or alveolar ridge with the bottom of the tongue.

Let's Say, "Through," Incorrectly

- Round Lip
- Flat Lips
- Tongue tip against lower gumline
- Tongue in a lower than usual "sh" position
- Tongue in the correct position but very lax
- Tongue tip elevated against the hard palate or alveolar ridge with the bottom of the tongue.

Let's Say, "For," Incorrectly

- Round Lip
- Flat Lips
- Tongue tip against lower gumline
- Tongue in a lower than usual "sh" position
- Tongue in the correct position but very lax
- Tongue tip elevated against the hard palate or alveolar ridge with the bottom of the tongue.

WORD IN ERROR: read

Techniques to elicit:

Place the Bite-R in the mouth, remove.

Ask the child to replicate the mouth posture and produce the R in read.

Techniques for errors:

Our focus is going to be on the lip and jaw placement.

WORD IN ERROR: part

Techniques to elicit:

Ask the child to say, "pah" then the child uses Bite-R position and say, "ert." We then ask the child to stretch out the ah, then the "er" and then shorten one then the other.

Techniques for errors:

Look at the articulators:

Lip placement/ jaw placement/tongue placment

Tongue tension

Tongue stability

WORD IN ERROR: Girl

Techniques to elicit:

Ask the child to create the Bite-R position and say, "Ger" if the child can say "ger" then ask him/her to then move the tongue tip to the front of the mouth by pointing to the spot under the nose.

Techniques for errors:

Tongue positioning for /g/

Tongue positioning for /l/

Tongue lateralization/stabilization

WORD IN ERROR: Work

Techniques to elicit:

W + erk (using Bite-R position)

Techniques for errors:

- *Discover the /w/ position, narrate and question the child*
- *stabilizing the lateral tongue edges*
- *moving the jaw and lips independent of the tongue*
- *care for tongue placement and tension*

WORD IN ERROR: For

Techniques to elicit:

Fo + er then stretch to fooooo + errrrrr. Then shrink and speed up the process.

Techniques for errors:

Our focus is on the tongue placement and tongue movement for the child.

Rules of Tactile Therapy using the Bite-R

1. Pay attention to neck, jaw and lip movements. We do not want the child to stabilize by using the neck.
2. NEVER does the child talk with the Bite-R in the mouth. This is different than the other tactile tools.
3. The lip position/tension will help with the correct sound.

Specifics about the Bite-R use can be found on my website and through a free online training session

Does working on the R sound excite you?

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