

Let's Hear It For /R/!

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Why is /r/ so hard to train compared to other sounds?

The /r/ sound is very different than most sounds we treat. If you think of beginning remediation for /s/, you have the child try to keep their tongue behind their teeth if they exhibit a frontal lisp and get them to attempt a snake sound. If they cannot produce /k/, you might use a tongue depressor to hold the tip down while they elevate the back and produce a /k/.

Why do these things not work for /r/?

The /r/ is different because of its variations. The /r/ sound has two different phonemes that can represent it. It can be consonantal /r/ or vocalic /ə/. Why is this important? For some reason, vocalic /ə/ is much harder to train, possibly due to the coarticulatory nature of the vowel and /r/ sound. However, initial /r/ or consonantal /r/ is not as hard to train. When most people think of /r/ therapy, they automatically begin with /ə/. It is this starting point that leads to failure for most new clinicians. If we say /ə/ is the hardest sound, why start with it? Many of us have certain placements we begin with when we train other sounds. I typically train final 'sh' first as I have found that it is easier. Same with final /f/ and final /k/. I could start with the initial placement for each of those sounds, but since I am trying to elicit the correct sound in one position, I am going to start where I believe it might be easiest. The /r/ sound is no different in that respect **except** that a lot of SLP's forget there is another placement/sound besides /ə/.

By beginning with initial /r/
you are building a foundation for final /ə/.

The vocalic /ə/ sound is the only consonant sound that is two sounds in one. That is the biggest hint that this sound is different from all the others. Also, /r/ is different from our other sounds because you cannot typically elicit a "good" production with just placement feedback. It takes more. A lot more!

**THIS IS NOT A QUICK FIX FOR /R/ BECAUSE
THERE IS NO QUICK FIX!**

The only success I have ever had with /r/ is through drill, drill, and more drill.

It is impossible to avoid drilling this sound!

Learning the sound /r/ was explained to me by one of my professors: It is a motor pattern that the tongue has not mastered. The tongue has to do two to three movements in succession to be able to produce it. Tongue goes up, makes contact with the side teeth, and then the sides of the tongue pushes against them so you get the correct tongue position for the /r/. She then compared it to learning to drive a stick shift or riding a bike. You have to do two to three things at once and the only way to master those motor patterns is through practice.

If you were learning to play the piano, would you sit down at the piano and expect to play Mozart? No! You would have to practice learning the keys and the notes. The only way you get better at it is by practicing.

Correcting /r/ is NO different!

Bunched Vs. Retroflex

Which one do you teach?

Why?

BUNCHED VS. RETROFLEX

This is one of the hottest topics of debate regarding /r/ therapy. The first thing to know is what is the difference? This is how I understand them and teach them. There are variations on these placements and productions.

BUNCHED R

The bunched /r/ is just that. The tongue is pulled back and the sides are touching the upper side teeth (or close to them). The tip of the tongue is not important and should not be a focus in therapy (do not say point your tongue back). In the bunched /r/ placement, the tip of the tongue is virtually invisible as it pulls back into the rest of the tongue when it is in the correct place. In this placement, the tip should not touch the front teeth and it is not pressed to the roof of the mouth, unless the child can make a good initial /r/ with the tip in another position. There are some kids that can make the /r/ with the tip of their tongue down, but I have only seen two in my 10 years of practice. Most kids will produce the bunched /r/ automatically and it is the easiest, in my opinion to generalize.

RETROFLEX R

This is where the **tongue tip** is up and the tongue is pretty far back in the mouth, but the sides still have to touch the upper back teeth. In my experience, there are three problems with this placement:

- 1) It does not generalize well
- 2) If the tongue tip flips down too fast, you will get an // for the /r/ or the next word will have an // sound associated with it.
- 3) You still have to have the child push the sides of their tongue out (for vocalic /r/) even if the tip is up and this is harder to do, in my opinion.

I typically only use the retroflex /r/ IF the child naturally produces /r/ that way in the word 'ray' and/or if I have tried everything else and I am not getting anywhere with the bunched approach. It is my VERY last resort, but I have used it.

Production Tips

NOTE: YOU NEED TO KNOW WHAT PLACEMENT YOU ARE WORKING WITH. HAVE THEM IMITATE THE WORD 'RAY' WHILE SMILING AND PUTTING THEIR TONGUE IN THE BACK OF THE MOUTH WITHOUT A LOT OF DIRECTION ON PLACEMENT FROM YOU. YOU ARE BASICALLY VIEWING THE PLACEMENT TO SEE WHERE YOU GO FROM HERE. YOU WILL HAVE TO LOOK WITH A FLASHLIGHT AND HAVE THEM IN FRONT OF A MIRROR

BUNCHED R

- 1) Have the child look in the mirror to see where their tongue is when they try 'ray'. **Tell them to smile!** Use a flashlight.
- 2) Look at your tongue and see how you make /r/. If you use the bunched, let them see your tongue and where it is in your mouth.
- 3) Tell them their tongue is going to smile inside their mouth.
- 4) Have them speak with only their tongue in the back of their mouth—this is really funny and you can have them say "My name is _____" while only moving their tongue. It's hard, but important to show them they are only going to use their tongue to make /r/, not their lips.
- 5) Have them try to bite (gently) both sides of their tongue at the same time. This shows them how their tongue needs to be wide across the mouth.
- 6) Explain the tongue will be in the middle of the mouth (meaning both vertically and horizontally).
- 7) Use a flashlight (mini maglites work great here) so they can see the back of their Tongue. They can have great placement in the middle of their mouth, but if the back of their tongue drops when they try to produce /r/, they will only see it with the flashlight.
- 8) Have another student in the group that has the correct placement teach the other kids. It works wonders sometimes when you are not having any luck!

RETROFLEX R

- 1) Have the child point the tip of the tongue up to the roof of the mouth.
- 2) The sides still need to be touching the upper back teeth as the tension in the tongue, not the type of /r/ placement you are using, is what makes /r/.
- 3) If you are not getting a decent /r/ (that is not a /w/) you need to either have the child move the tongue more to the middle or more to the back of the mouth. Be careful: Too far back will yield a glottal and too far front will yield an //.

Establishing Initial R

The child does not have to have /ə/ to say initial /r/.

In fact, most of my kids are unable to say /ə/
until we have successfully completed final /r/ words
without co-articulation

It can take a very long time to shape /er/. Also, I **never** have the child produce sounds in isolation. I figure they are not going to produce them that way in conversational speech, so why start there? It is especially hard to start in isolation with /r/ and I believe that is where a lot of SLP's get stuck!

STEP 1

NONSENSE WORDS

My first step with /r/ kids would be to do nonsense words paired with other nonsense words. I have 80 of them on a sheet. They are simply initial consonants with long vowel sounds. Make a lot of copies, you will need 5 sheets per child. What you do is verbally put the word "ray" in front of every word on that sheet and have them say "ray bay" **after you** etc. You will need to say all of your initial /r/ words like this "erray" where you hold out the /ə/ a little in the beginning to provide them a beginning model for /ə/. **YOU DO NOT EXPECT YOUR KIDS TO COPY THE /ə/ PART!**

Remember: You are going to be their best source for a good model and I rarely let my /r/ kids do any drill without me saying it first. Everything my kids do is an imitation of what I say. You will find they will change their productions based on how you say it. Try saying the words while changing your intonation and you will hear them imitate you in the same exact way. They need to be able to do the same with /r/.

Clincian: ray bay (Remember to say /ə/ in front of **your** /r/ words!)
Child: ray-bay

Example of feedback: Oh, your lips came together and you said a /w/...try biting the sides of your tongue when you say the first word. Or you can say "you need to have your tongue smiling up inside your top teeth." **Refer to PRODUCTION notes above**

Clincian: ray bee
Child: ray-bee

Clincian: ray bye
Child: ray-bye

(You keep score by doing this: If they missed it, put a line in front of the word, if they got it right write the word "ray")

Clincian: ray bow If they miss it, give more Feedback: Lips came together again....let's get back to the /r/ spot...bite the sides of your tongue, etc.
Child: ray-bow

Clincian: ray boo
Child: ray-boo

Then, I do the same thing but use /d/ nonsense words
ray day
ray dee
ray die
ray doe
ray doo

The target here is to get them to smile when they say the /r/ and for them not to glide to the /w/. **You will only use 1 sheet per session per child** and you may not get through that one sheet depending on how much feedback and placement work you have to do with the child.

After the 80 times with 'ray' (which goes pretty fast--about 7 minutes, but you still need to give a lot of feedback!), **in the next session**, I switch to 'ree' on a new page and start all over again getting 80 productions with the word 'ree' in front of every word on the page.

ree bay
ree bee
ree buy
ree bow
ree boo

From there you do
1 Page of 'rye'
1 Page of 'row'
1 Page of 'roo'

This means you will spend **at LEAST** 5 sessions with the nonsense sheets, maybe more if you don't get through one sheet each session. It's okay if you don't as long as you are working on feedback and placement. You should hear their /r/ getting better as you go on, even though it might not be a perfect /r/, but an approximation. Just don't let them do the /w/ anymore. You could spend over a month here, depending on how much you see the child and how much feedback and placement you have to do.

Note: You may work on one sheet over several sessions depending on the number of children per group.

Remember

You are not working on perfect /r/ here, but one that is an approximation that is not a /w/. How do you know? Contrast it on the nonsense sheet with the word 'way'. Explain you are going to have them do something hard by saying an /r/ word with a /w/ word. You should hear a difference. Fine tuning your ear to a good /r/ approximation takes time and practice on your part.

SCORING on the Nonsense Sheets

I keep track on the nonsense sheet **by writing the word** "ray" (or ree, rye, row, roo) in front of the second nonsense word ONLY if they got it right. If they don't, I put a line. (I do not type anything, it's all written, it's just typed here as an example.) This way I can quickly add up the ones missed and get a percentage.

Here's a example:

ray bay
---- bee (missed it)
---- bye (missed it)
ray bow
ray boo

Then I put a sticker on it and they can take it home and practice more if you wish.

Note: I also use the nonsense sheet for every other sound I work on. They are great for quick drill and give the student a lot of practice.

STEP 2

Webber's Artic Drill Book (or similar)

NOTE: I drill the same words every session. I do not typically have the child repeat the word they missed unless I have enough time in the group and have a small number of kids. Otherwise, I count it as missed, but let them know about it and move onto the next word. I always give a verbal model through EVERY level. I believe it makes a big difference.

In this step, we move onto initial /r/ words and stay there drilling (still with imitation) until they have mastered them to 90% accuracy. This may take several sessions. You should strive for 60+ words per session. If you can get at least 60 in a group of three, you are doing well. I have supervised clinicians that would only get 10-15 production words per session. This is insufficient to change /r/! If you're playing a game and only getting a limited number of productions per child, it may be time to delay the game until the end of the session. A quick 5-minute game should suffice or you may have to eliminate them all together. The older the children, the less time you should use playing games. Those are the children that need a much drill as possible.

STEP 3

Phrases and Sentences

Next you will move onto phrases drilling until you reach 90% accuracy. After that, you move onto sentences, again staying at this level until 90% accuracy is achieved. I usually try to get between 60-80 productions per session per child in a group of three kids and more productions if I have two kids or less.



STEP 4

Explaining Co-articulation and the use of 'Red'

Once you have finished initial /r/ in words, phrases, and sentences, you can move to final /ə/ and the fun begins. At this point, you can use the word 'red' at the end of every final /r/ word (from Webbers Jumbo Artic Book—one syllable words only) to help them get the final /ə/. This is co-articulation and you have them say 'air red', 'are red' and so on. You can write on a piece of paper:

Air red--Circle the /ə/ in air and the /r/ in red. Draw an arrow from the /r/ in red to the /ə/ in air and say what is written below:



Tell them they have incredible brains that think ahead for them and begin to get their tongue ready to make the /r/ in red even before they made the /ə/ in air. That's why we are putting them together. The /r/ in red is going to **jump back** and help you get the /ə/ in air.

The KEY to co-articulation

They need to say two /r/ sounds with a break between words and it takes A LOT of drill and a TON of feedback, but it works. You will spend months and months on this. Proper feedback will determine what they can do with it. Look in their mouth. Have them say the words like this (after your model of course):

Aaaiierrr (pause) eeerrrrred

Draw out the sounds as much as the child needs to give them time to move their tongue to the correct place for /ə/.

You have to make sure their tongue isn't dropping when they produce the /ə/ at the end of the word.

Aaaiierrr (pause) eeerrrrred

That is what commonly happens which is why the sound comes out 'uh' or an /a/ sound. How do you see this? You can produce /ə/ with your mouth open and you need to have the student do that as well in front of a mirror while you shine a flashlight in their mouth. You need to be able to see, and so will they, the back of their tongue. If it's falling when they get to the /ə/ you will see it...it's hard to miss when you are looking in their mouth with a flashlight.

CO-ARTICULATION PRODUCTION TIPS

This is where it gets tricky. If you are doing the bunched /r/, you are now aiming for the same placement, but the tongue cannot drop between the final /ə/ word and the word 'red'. They have to have tension in their tongue by pushing the sides of their tongue against the upper side teeth. You can simulate this by having them push their hands against the inside of the door frame to show what their tongue should be doing inside their mouth.

Again, the tongue should be in the middle of the mouth both horizontally and vertically. The sides can curl up a bit inside the upper teeth to get the placement for the tongue and allow for pushing against the side teeth.

Retroflex /r/ with co-articulation

If you are using this placement, you will still have to make sure the sides of the tongue push out and make contact with the side teeth. The tip will stay up during the production of both /r/ sounds. It is harder, but can be used, especially if the child has a natural disposition towards the placement.

Either way, make sure you have the child say two words and not one word that runs into another. If that is what you're getting, you are going too fast (or the child is) and you need to slow down their productions. The slow speed gives their tongue time to reach the /ə/ placement.

NOTE: Co-articulation works with other sounds too. Refer to your Artic Techniques and Tips Handout for information on how to elicit sounds in other positions IF the child has the sound in one position already. Has anyone done that before?

EASIEST SOUNDS TO PRODUCE (and how to break them down)

I had an interesting discussion recently about which final /ə/ sound is easier to elicit. I have found that words like air, bare, gear, and fire are easier to produce at the beginning of co-articulation. Others have found better luck with /ar/ and /or/ words. I usually try them the first session just to see if the child can do them, but if they are really off, production wise, and I am getting a good /ə/ with the others, I will skip /ar/ and /or/ for a few sessions and add them back in here and there.

From the discussion we had, it seemed those in the north had better luck eliciting the /ə/ using co-articulation in the /ar/ and /or/ words, while those in the south found them harder. Could be due to dialect and southern drawl, who knows. You will only find out which is easier for your student by trying them all at first.

For words like 'fire', I have the child say this word type by breaking them down into 'fie' 'eeerrrr' 'eerrred'. There is a slight pause in between the 'fie' and 'eeerrr' as well as the normal pause before the word 'red'. I have found that breaking that final /ə/ word down like that (and others like it tire, wire, etc.) really helps with the placement.

The other difficult sound is the /ə/ when it is paired with a single consonant in a word like 'her' and 'sir'. In this case I draw out the word as much as I can to make it almost two syllables and then add 'red'. It would be something like this: 'hhhh' 'eeerrr' 'eeerrred' This is one of the hardest words, but you should hear it getting better as they get better with co-articulation in general.

Don't forget to break down 'ar' as 'a + er' saying and drawing out each sound where your jaw drops for /a/ and comes up moving your tongue into position for /ə/. Hold it out as long as the child needs to get them to start on the bottom with the /a/ and then move to the /ə/ placement.

The same with 'or' which is really /o/ + /ə/. They have to round their lips at the beginning or they will not get it. If they are going to say the word door, it would sound like this:

/dɔːr/ /eeerrrr/ + eeerrred
DOOR + RED

where the first part almost sounds like the beginning of the word 'dough'.

It helps to write it down like I did above for the child to see how there are 2 sounds in there. I explain that we just say them so fast, you don't hear that we really are saying two sounds in there. This explanation usually helps a lot

You will stay here drilling the final /ə/ words with 'red' until you reach 90%.

STEP 5 **Dropping 'Red' and moving on**

Now you have to start over with the final /ə/ words without 'red'. (I never use the two syllable words in Webber's book, only one syllable words.) This goes a lot faster and you should be able to move onto final /ə/ phrases pretty quickly, again, staying there until you reach 90%. After that, it's final /r/sentences until 90% accuracy.

TRICK: One of the children on my caseload taught another child how to produce the sounds without 'red' by having the child pretend he was still going to say it. We then started calling it "say 'red' in your head" and it really worked for this other child that was having a hard time dropping 'red'!

NOTE: It may not be until this point that you can get the child to say /er/ in isolation!!!! It may even be a while beyond this point!

DO NOT WORRY ABOUT /er/ AT ALL!

STEP 6

Medial R—Just a formality

At this point, you should be able to get through medial /ə/ pretty quickly. I start with words and move to phrases, then sentences after each level is at 90%.

STEP 7

Reading

Now you can have the child work on reading. I have included some extremely /r/ heavy stories in your handout. You will find /r/ in blends, initial, medial, and final positions in these stories. They are wonderful exercises to keep developing good /r/ skills.

STEP 8

R-Blends—If needed

Some kids will need to drill r-blends. I usually try to just do the reading portion of drill and avoid these as most kids are able to fix them on their own, but some cannot. You will have to judge if the child you are working with will need this drill.

STEP 9

Dismissal

I often have people ask me how I know my /r/ kids are ready to go. I base it on one of two things:

- 1) They are 90% in the therapy room over one month in conversation.
- 2) I will have the students come in and have them try to mess up the /r/ words on purpose in sentences. It's pretty funny when they can't do it and they are amazed.

Using IPA Fonts on your computer

Go into Word and select Arial Unicode MS as your font.

Click Insert from the top menu and then Symbol.

A new box will pop up that will have the symbols in it. Pick IPA from the drop down list and you will see all the symbols there you should need.

I actually found them all and copied them into a word document as I thought it would be easier to cut and paste when I needed them instead of having to look up every symbol every time. It is on my website: www.expressionspeech.com

You can access all of the documents used today plus MANY others by going to our WEBSITE:

www.expressionsspeech.com

Be sure to join our group on Facebook too! The link is on our website!

For those of you that like to “see” therapy in action, I have started professional production on an /r/ video to accompany this program that should be available sometime in the spring! It will be available for purchase on the website above.

Make Voice Recordings on Your Computer!

<http://audacity.sourceforge.net/> This is a great way to make a recording of your voice and the child’s productions like the ones you heard today. You will need a microphone (you can get them at Walmart that is a combination headset and microphone). This is great for kids to hear how the sound and they love to hear themselves.

Smartphones

Most cellphones have voice recorders as well and the ability to connect headphones. You only need the headphones to occlude the hearing, not for listening, so they don’t even need to be plugged in.

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OVERVIEW OF WHAT YOU NEED (AND NEED TO DO OR NOT DO) TO CORRECT /R/

- 1) Mirror—do not do therapy without!
- 2) Flashlight—ditto above
- 3) NEVER focus on /er/
- 4) NEVER drill any /r/ in isolation-Use words!
- 5) Nonsense drill sheets
- 6) Word/phrase/sentences level drill sheets (Webber's book is great here, but others will work)
- 7) DRILL, DRILL, DRILL—NO way around drilling this sound!

FEEDBACK

If you were told your IEP or notes were wrong, but no one told you WHAT to do differently, how would you fix it? I witness that happening over and over again with clinicians trying to correct /r/.

Feedback is the key!

It will take you a little time to get used to discriminating between correct and incorrect productions of final /r/ with and without co-articulation—give yourself that time!

Don't give up!

bay
bee
buy
bow
boo

day
dee
die
doe
do

hay
he
hi
ho
who

ray
ree
rye
row
roo

pay
pea
pie
poe
poo

tay
tee
tie
toe
to

lay
lee
lie
low
lou

say
see
sigh
sow
sue

kay
key
ky
koe
koo

fay
fee
fie
foe
foo

may
me
my
moe
moo

way
we
why
woe
woo

gay
gee
guy
go
goo

vay
vee
vie
voe
voo

nay
nee
nigh
no
new

zay
zee
zie
zoe
zoo

Data Collection

There is a DIFFERENCE in how you are going to score final /r/ compared to the scoring of other sounds. When you score an /s/, it's either an /s/ or it's not. There is usually no acceptable approximation of /s/ (unless you are working on a lateral lisp with the /ts/ method—you might use approximations here).

When you score final /r/, especially with 'red', you have to be more flexible with approximations and give credit accordingly. This will be based on your opinion of how the child produced the one before and if you KNOW they can do it better. However, when you score this way, you need to document that is how you're scoring. Why is that important?

Remember that you move on after 90% accuracy at any level. If you're working at an approximation level, you do not want to move on when they reach 90%. You will need to keep going until they are 90% without counting approximations. In other words, the sounds need to be good final /r/'s (with or without red).

PLAY AUDIO: Scoring Practice (Circle Choice)

Air	Yes	No	Approximation
Bare	Yes	No	Approximation
Care	Yes	No	Approximation
Ear	Yes	No	Approximation
Fair	Yes	No	Approximation
Fire	Yes	No	Approximation
Gear	Yes	No	Approximation
Hair	Yes	No	Approximation
Here	Yes	No	Approximation
Near	Yes	No	Approximation
Pear	Yes	No	Approximation

Take Home Message Re: DATA

You will know when you hear a GOOD /er/. You will also know when you hear a bad /er/. The rest is pretty much in between and you will have to decide what you will accept as approximations. It will be different with every child and different depending on your mood and the day!!!!

How long will you be at this level?

After starting final /r/ with co-articulation, it took Easton 7 sessions to establish a good final /r/ with red where you could actually hear the /er/ part—still low %. After that, it took another 15 sessions before we could drop “red” from the word. Putting him under headphones and recording him made a HUGE difference. I highly recommend downloading Audacity (link in handout) or recording your students on your phone or iPad. Use headphones to occlude their hearing...this seems to make a difference!

It may take your students longer to reach this level and that's okay—keep drilling—it's the only way to get it!

For Jimmy & Brandon

After starting final /r/ words, 12 sessions later both boys were at the final /r/ sentence level.

Brandon completed medial /r/ (words, phrases, sentences) after 10 additional sessions and moved onto reading (he surpassed Jimmy).

Jimmy moved onto medial /r/ words after 10 sessions.

When I started with them at the beginning of the year, they were at the initial /r/ word level.

Both boys were in the 4th grade. The goal was to have them dismissed before 5th grade. They almost made it, meaning we were pretty close to correcting their /r/'s within a school year 2x a week in therapy.