

Remapping Letter Reversals

Over the years, I have witnessed many children who have had letter reversals. I remember hearing in meetings this being described as a characteristic of dyslexic children. A common one in the early grades is b/d. It wasn't until I started reading more about struggling students and the science of reading research that I began to realize these children had not mapped these particular letters fully into their brains. They may have partially mapped the letters seeing as they both have sticks and circles, but the confusions were happening because these children needed to finish orthographically mapping these letters and their distinctions. Connecting the sounds they already know with the letters that represent them is what enables the orthographic mapping process to occur. This is when a child can just look at a letter or a word and just seem to instantly recognize it. Those letters or sounds have been activated and stored in their long term memory and can be instantaneously recalled. This is what makes students automatic or fluent in their letter or word reading. This process is essential in order for letter or word retrieval to be seamless.

Last year, I watched some videos from Reading Rockets, and I was connected with the Readsters website. This is where I saw reversals discussed as a common concern. One of the videos I watched featured a reading specialist coaching a child about using their b-hand to determine if the letters on the page were a b or a d. The idea is that you use your left hand and your middle finger to make a stick and your pointer finger and thumb to make a circle. When you compare that to the letter on the page it should match. Children can wear a rubber band or sticker, at first, to identify their b-hand. Utilizing their b-hand becomes a built-in support. I thought this was amazing, and I began using it with my first and second graders who were having trouble. Although this could realistically work with any aged child.

This method was more successful with my students than anything I had previously tried; however, I've come to learn that this is just a quick fix. If we really want to correct this problem in the long term, we need to take the time to help students finish the process of orthographically mapping these two similar letters in their brains. To do this, I needed to build in multiple opportunities in my instruction for students to practice connecting the sounds or phonemes of /b/ and /d/ with the letters, or graphemes, b and d that are used to illustrate those sounds. As I continued reading more about what activities would be best to help students finish mapping these sounds, three stood out to me.

The first activity is sound dictation. This meant that I would have students write the letter, either b or d, many times on a dry erase board while saying the matching sound. For example, students would write the letter b while saying /b/. This helps establish the connection between the phonemes and the graphemes. Once a student has written about 15-20 repetitions of the letter on a line or 2, I then time them. We make it into a game and they try to beat their score by

increasing the number of times they can accurately write that letter and say the sound within one minute. Although timing students can be motivating, it is still extremely important that the students are using correct letter formation. If they are not, I give them corrective feedback as they continue writing the letter.

The second activity is Rapid Naming Fluency with the letters that are causing confusion.

f	L	b	A	w	V	F	h	D	n
U	i	C	X	c	J	l	q	K	x
o	G	j	d	N	y	B	m	u	Z
Q	r	Y	H	R	g	O	p	I	e
v	M	s	a	E	w	S	k	P	W
t	z	B	Z	d	H	l	S	v	D
P	n	G	i	k	A	c	q	M	a
b	C	e	p	Q	e	L	y	g	X
V	m	J	h	N	u	W	o	I	o
w	T	s	i	R	Y	x	E	r	y
O	u	j	F	a	a	U	f	K	t

The way this works is there are several lines on a page that have the letters that are being confused along with a few other letters in between. The goal is to have the student read 3 lines correctly three times. If they can read the lines correctly three times then they can move onto the next line the following day. Being able to identify the confused letters within a group of other letters helps them to identify the distinguishing features.

The third and last activity is reading word lists with approximately ten words that begin or end with the letters that are being confused. I have been using a sheet that has a column of all letter b words, a column with all letter d words, and then a column that utilizes words that have both b and d so that the student really needs to pay attention to the distinguishing features of the letter.

Although the b-hand method seemed successful with many students last year, by itself, it did not provide the necessary repetitions that some children need to map and connect sounds and letters into their brains. Once I began incorporating these activities into my instruction on a daily basis, I found that students who reversed letters such as b and d made huge improvements in their ability to accurately identify/use the letters that caused confusion. As students show signs of improvement, these supports will no longer be necessary. This is the end goal of all of these activities--to have enabled the process of orthographic mapping to be complete for these children.

Although these activities are the main ones I utilize in my everyday instruction, they are not the only activities or supports that can be provided. Learning more about the orthographic mapping process from experts in the field like Linnea Ehri and David Kilpatrick have definitely helped to

give me a better understanding of how to “rewire” student’s brains so that letter reversals are not an area that will hold them back when trying to decode words and read connected text. If you are finding letter reversals are a “hang up” for your students, maybe you’ll want to give these practices a try.