**Braille Hand Movements: Tessa McCarthy (5:53)**

TESSA MCCARTHY: Today we're going to be talking about some strategies for helping beginning readers have really good hand movements to help them be good readers. So typically, when we're talking about young beginning braille readers, we want to see hands that are resting on the page in a lightly curved fashion, all of the fingers are on the page. The fingers aren't pushing down on the braille, and they're just lightly resting for a fluid motion.

Good braille reading involves both hands and all 10 fingers. With ABC Braille Study, we found that it was very important for beginning braille readers to start out reading with two hands. We found that as a general rule, readers who read with only one hand tended to read a little more slowly. And we also found that students who began reading with just one hand never tended to incorporate that second hand when they were reading. So if I had six words to give to teachers about beginning braille readers, it would be two hands on the page.

So most beginning braille readers start out using a pattern that we would refer to as a parallel pattern. So when a beginning braille reader is using a parallel pattern. Their hands are pretty much glued together. So as they're moving across the line. Their index fingers are often going to be touching, and they'll just slowly move across the line as they're reading.

When they reach the end of the line, then they'll bring both hands back down to the next line, and they keep reading with both hands always together in a parallel fashion. Students will eventually probably progress to what we would refer to as a split pattern. So when a student reads with a split pattern, both hands will start out on the first line together, like they do in a parallel pattern. However, when they get to about the midpoint of the line, then the left hand is going to drop down and find the beginning of the next line while the right hand continues reading.

When the right hand finishes that line of braille. It's going to slip down, find where the left hand is, and they start the process all over again. Going across to the midpoint of the line, left hand splits, comes down to the beginning while the right hand finishes. Right hand comes down to join the left.

What we hope that our students all aspire to is a scissor pattern. So when you read using a scissor pattern, you start on the first line with the hands together, but when you get to the midpoint, the left hand drops down like it did in a split pattern while the right hand keeps reading. The left hand is also going to start reading the next line of braille instead of waiting for the right hand. The fingers meet in the middle, and then the left hand drops down while the right hand finishes. It sort of looks like a pair of scissors moving back and forth across the page.

As students progress through this pattern of increasingly efficient movements, they will become faster readers because they're able to cover more of the page more quickly. It's just more efficient. However, this progression does not happen overnight. Students can only move their hands in a fashion that facilitates them understanding with comprehension. So while a student might be able to read a comic book with a split or a scissor method, if they're reading a textbook or some heavy nonfiction, they might have to read using a parallel method.

In addition to the different hand movement patterns, there are certain characteristics you should look for in your beginning braille reader. For instance, one thing you might see is called scrubbing. When a student is scrubbing they'll move across the line, but then their finger will stop on a specific character. Instead of continuing to move in a smooth, horizontal manner the finger will move up and down in a vertical pattern. It typically means that the student is having trouble with character recognition.

If you notice that your student is scrubbing it, then you'll want to go back and add in some character recognition activities to help build that character recognition and reduce scrubbing as they are practicing their reading. Another characteristic to look out for is regressions. People who read print visually do this all the time, and they typically don't even know that they're doing it. Your eyes just jump back and make these little backward movements as you read.

Well, braille readers do the same things with their hands. As the student's reading, you'll see either of their hand, or even maybe just a finger, jumping back to review material that's already been read. Part of the benefit of reading with two hands is that while your left hand progresses and does those little jump backs, then your right hand can keep moving and gaining new information in the text.

That's actually an advantage the braille readers have over print readers. Print readers can't tell their left eye to jump back and do the regression while their right eye keeps reading. Readers can do that with their hands. Just to recap, if I had six words of advice to give somebody who's working with a beginning braille reader, get two hands on the page.