Why is Reciprocal Teaching a High Impact Method of Instruction? Part II

In my last blog, I discussed why reciprocal teaching is considered one teaching method that has an extremely high impact on student achievement (Fisher & Frey, 2016). In John Hattie's analysis of over 50,000 research studies, he found that any indicator with a score of d = .40 or higher greatly affected student outcomes (Miller, 2010). Since reciprocal teaching had a score of d = 0.74 (Hattie, 2009), educators need to take note and include this teaching strategy in their teacher's toolbox.

One of the goals of teaching is to help students understand and retain what they learned in class. Retention rate here refers to the amount of information retained from a lesson. The lower the rate, the less the person remembers about the lesson …thus the higher the rate, the greater chance the student has in retaining or recalling the information.

As explained in Part I, one way to increase retention rates is by activating more regions of the brain. One of the easiest ways to do this, is to teach the lesson to someone else, thereby elaborating on what they had just learned.

Process

When I'm talking to students about their brains and how they learn best, I show them the Dana Foundation PET Scans (described in Part I) as we discuss the various regions and functions of the brain. They then begin to understand that the act of teaching activates more regions of the brain. And then undoubtedly, the question, "Do I have to stand in front of a large class to teach something?" comes up. The answer is "No, you just have to teach another person. It makes no difference if it's an entire group of people your teaching, or if you're teaching your friend, your little brother, or your mom."

I then go on to explain some examples. "When you're doing your math homework, teach your younger brother how to subtract large numbers."

"What!" Joey exclaimed one day, "My little brother doesn't even understand numbers. How can he learn subtraction?" I then respond, "Well, you're right, he probably really won't understand your homework, but he's not the one learning the lesson…. you are! You're the teacher and since your brain is more active, you are the one that will remember better what you've learned because you taught it to someone else."

This simple example should be explained and practiced over and over again. Not only in the classroom when students work in pairs, but at home when mom or dad are helping their child study. Teachers need to remind the parents that they must act as the student and let their child teach them the lesson.

Studying with their Parents

If they're studying the Civil War for example, the parents should not ask simple straight questions like "What was the year of the Civil War?" "Who was President?" You want the child's brain to be as active as possible so the parent should say something like, "So, what was the Civil War? Tell me about it. When was this? What was going on in our county at this time? Why did it happen? I don't understand. Why did people feel that way? Tell me about the leaders … who were they and why do you think they acted the way they did?" Let the child elaborate and explain or teach the lesson to the adult. Parents need to pretend they know nothing about the subject. Students understand that they are playing the role of "teacher" and that their parent is acting, or playing the role of "student."

But what should the parent do when they see their child is stuck or doesn't have the right answer? The parent needs to come out of the "acting mode," help them understand the question and as well as the correct response. But don't stop there. Once the child understands the correct answer, it's absolutely necessary that the child go back into "acting mode" as the instructor and that they explain or teach the "student," his parent, the correct response. This final act will strengthen or reinforce the correct answer in the child's brain.

Other Examples

It's important for students, especially younger children, to realize it doesn't matter who they teach, because it's the act of teaching that is improving their learning and it really makes no difference if the "student" learns the lesson or not. This activity is to help the child learn the lesson better and improve their own memory and retention rate.

When talking to children I'll ask them, "Do you know who makes a GREAT student in your family? Your dog!" They all laugh but then I tell them a story of a young boy named Andy and how when he learned about this technique of teaching, he decided to take his spelling words and teach them to his dog.

"Dr. Whitaker!" he yelled one day, "I take my spelling words and I teach them to my dog, Lady! I say, 'The word is clock… that's spelled c-l-o-c-k, clock'. Lady sits and listens and smiles. That's how I do all my spelling words."

"That's perfect!" I said to him, "Is it helping you remember your spelling words?" "Yes," he exclaimed, "I'm getting an A in spelling and now Lady knows how to spell!"

But even if the child doesn't have a pet, he can teach his stuffed animals, toys or just simply look in the mirror and teach himself. This act of teaching needs to be practiced over and over again. Every time an instructor teaches a single concept, the teacher needs stop, have the students get with a partner and practice reciprocal teaching. And this can be done at any age level. I've used this technique with students as young as three years old and just used it again with my senior citizen's group last week.

Conclusion:

The more regions or lobes of the brain that are actively involved in the learning process, the higher the retention rate and the greater chance one has in remembering and recalling the information taught (Whitaker, 2009). It takes time to develop the skill of reciprocal teaching so be aware this method may start out slow and some students catch on quicker than others. But through practice and positive coaching, this technique is not only fun, it really is a great asset to the learning process. So remember, "If you want to learn something, you have to teach it!"

For comments and/or questions, please don't hesitate to contact me at
DrLou@meteoreducation.com
lwhitaker@meteoreducation.com

Lou Whitaker, Ed. D.
Brain Junkie
METEOR
CONNECTING THE DOTS

Bibliography

Dana Foundation. (n.d.). (Dana Foundation) Retrieved September 5, 2017, from Dana Foundation: www.dana.org

Fisher, D. a. (2016, April 4). Corwin Connect. (Corwin Press) Retrieved September 5, 2017, from Great teaching by design: http://corwin-connect.com/2016/04/great-teaching-design/

Hattie, J. (2009). Visible learning: A synthesis of over 800 meta-analyses relating to achievement. New York, New York, USA: Routledge.

Miller, G. (2010). Visible learning by John Hattie (2009), Summary by Gerry Miller. Tyneside EZA Consultant. Gerry Miller.

Whitaker, L. (2009, April). Picture this: Teaching mapping to improve student achievement. Today's Catholic Teacher Magazine, pp. 34-35, 38.