

Brain Plasticity – Supporting Recovery from Brain Injury

by Kathy Brown, M.Ed.

One of the wonderful things about Brain Gym® is that there are ways to use it creatively, in any setting, with all kinds of people, no matter what their “challenge” or “diagnosis” might be.

Some time ago, while visiting friends on holiday, I had the opportunity to work with a man I’ll call “Robert,” who was recovering from brain tumor surgery. A very intelligent and capable business manager before his surgery, he now had significant challenges with simple tasks. He said, “Sometimes I need to lock the door. I can see the lock in the door, and the key in my hand, but it takes real effort to get the key lined up right with the lock. And getting my coat onto a hanger takes a lot of figuring out.”

Current books and articles on brain function are filled with the new buzz word: “brain plasticity,” the capacity of regions of the brain to take on new roles. Brain plasticity may account for how recovery occurs following damage to the brain from accidents or stroke. I was interested to see what kinds of shifts Robert’s mind-body system would manifest following a Brain Gym balance.

Robert and his wife arrived for the session, and we began with PACE, the Brain Gym warm-up. One element of PACE is to do the Cross Crawl*. Robert did not have sufficient balance to accomplish the Cross Crawl while standing, so he learned and practiced this movement pattern while sitting on a chair. He had great difficulty bringing a hand to the opposite knee, indicating that his two brain hemispheres were not fluidly communicating with each other.

I asked Robert which issue was the most important to address today, and he selected his “coat” issue. I had Robert act out the situation, to illustrate just how his challenge manifested. Standing at the coat rack, he held his coat in one hand and the hanger in the other, and looked at them. He easily put the hanger into one shoulder of the coat, but it took some processing to figure out how to get the other shoulder onto the hanger. Then he pointed to the

coat rack rod and said, “Now, this is where I really have to think. See how the hanger tops are all lined up one way over the rod? I have to look at this hanger and be sure the top is curved the same direction as the others, so I can get it onto the rod.” I could only imagine how exhausting it would be to live each day with this kind of challenge.

An important part of the balance process is supporting the learner in creating his own goal. However, I’ve learned that in situations such as Robert’s, it’s sometimes helpful to offer a suggestion, especially one that simplifies the issue down to its essence. I offered this goal: “I understand left and right.” His eyes lit up with excitement and anticipation, and he said, “That will help!”

Robert’s learning menu** called for Dennison Laterality Repatterning, a process that supports the two brain hemispheres in communicating more fully with each other. At the end of this process, although he was still doing

Robert had made two huge shifts: understanding left and right, and knowing where the middle is.


Cross Crawl sitting down, it was much more fluid -- Robert’s hand moved without hesitation to the opposite knee. When we returned to the coat rack, I handed Robert his coat and hanger. He slipped the coat onto the hanger and hung the hanger on the rod in the blink of an eye! You can imagine the surprised look on his face, and that of his wife!

My next opportunity to work with Robert came the next day. Robert arrived with his face beaming with pleasure and then he showed me -- he could Cross Crawl standing up! He said, “It just kind of happened -- and I practiced all last evening!” We celebrated with an enthusiastic “high-five!”

This time he asked to work on the “key in the lock” goal. In acting out this goal, he took his keys and went to the door, saying, “I always have to look at the key, and be sure I’m really lined up with the middle of the lock, and that the key is pointing straight in.” I suggested a simplified goal that followed from the previous one: “I know where the middle is.”

This time Robert’s learning menu called for an element from the Edu-K In-Depth material, a free movement/dance experience. We imagined gentle music playing, and his wife and I had a great time joining Robert in freely flowing around the room, moving in any way we would like. Then Robert was drawn to doing some simple Brain Gym movements. Following this, he took his keys and approached the door again. He slipped his key into the lock smoothly and easily. He said, “I didn’t have to think about it at all -- I just did it!”

Because of my travel plans, I was unable to do more work with Robert. But he had made two huge shifts: understanding left and right, and knowing where the middle is. I left Robert and his wife with instructions on a variety of Brain Gym movements, and contact information for their nearest Brain Gym consultants.

Robert’s wife later commented that these simple shifts and accompanying sense of ability had rippled out through all his daily activities, and brought him a long-awaited sense of accomplishment and peace. 

* Cross Crawl is one of the Brain Gym “Midline Movements,” done by raising one knee and then the other, alternating back and forth, each time bringing the opposite arm or elbow over to it.

**Learning Menu: The list of movements and processes from which the learner may choose, to facilitate their own learning.

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