

Aphasia Insights!

January 2021
Volume 3, Issue 02
January 26, 2021

“A tendency to act only becomes effectively ingrained in us in proportion to the uninterrupted frequency with which the actions actually occur, and the brain “grows” to their use.”

The Laws of Habit.
Popular Science Monthly,
Vol. 30, February 1887.
1-16.

William James
(1/11/1842-8/26/1910)
American philosopher
and psychologist

Stroke Educator, Inc. is committed to educating the wider public about stroke and the 50 state “*Aim High for Aphasia!*” Aphasia Awareness Campaign.

Stroke Educator, Inc.
6 Aspen Drive
Brunswick, ME 04011
207-798-1449
tbroussa@comcast.net
www.strokeeducator.com

Speech Therapists are the Trim Tab of Aphasia Recovery.

By Tom Broussard, Ph.D.

A trim tab is a rudder within a rudder. It takes a lot to turn a big ship and requires huge rudders to change course. But they are so big that it often takes another rudder within the rudder. There's a tiny sliver at the edge of the rudder called a trim tab. It's a miniature rudder.

Moving the trim tab builds up low pressure that helps pull the big rudder around to steer the ship.

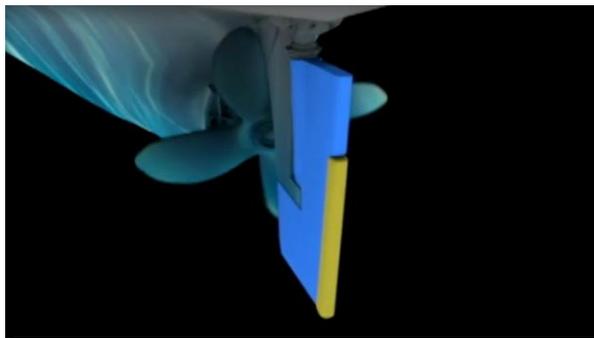
The inventor Buckminster Fuller used trim tabs as a metaphor regarding the forces of change.

When people with aphasia (PWA) have lost their language, it takes a long time to get their language improved (granted more therapeutic activities) and replace what was lost.

It takes years to develop one's language in the first case with billions of cells (neurons) and dendrites, trillions of synapses and thousands of miles of myelinated fiber.

Once it is damaged (often by stroke), it requires a similar herculean amount of effort (and time) to repair it.

The effort that is needed requires persistent, repetitive, and intensive language activities to induce plasticity (the capacity to convert thought and cognitive activities into neural matter) that increases the number of dendrites, synapses and fiber. More neural matter means more learning and language improvement.



Trim Tab (in yellow), Google

More time is also needed for those activities to create the long-term improve

ment that comes as a result of sustaining those activities for the long-term.

The aforementioned time that is needed for PWA to recover is measured not in days or weeks, but months or years. The brain takes a long time to manufacture the new neural (brain) matter that needs to be woven into the learning field and the resultant language improvement.

Language damage from a stroke requires continuous therapeutic language activities for a protracted period of time to recover, yet

formal therapy ends very early in that same recovery process. Absent a huge addition of more therapy sessions and resources, the only thing left is constant therapeutic language activities *without* formal therapy.

Speech Language Pathologists (SLPs) (or speech therapists) speak to both the short- and long-term therapeutic solution (for PWAs) as part of their practice.

Their work is designed to start the process of repairing the language of patients *in the moment* (with short bursts of plasticity) as well as establishing a habitual therapeutic environment *using* those activities (now and in the future) to help create the *habits* that are needed for the long-term application of *those very same activities*.

The neurological changes that are needed to repair one's language do not appear overnight. They happen gradually based on long-term constant plasticity-induced pressure (and resultant change) brought about by constant language activities.

“Those actions which appear the most insignificant, if only they are constantly repeated, will form for us in the course of weeks or months or years an enormous total which is inscribed in organic memory in the form of ineradicable habits” (Payot, 1914).

The neurological inertia of the mothership of language is massive and measured in millions, billions

and trillions of neural (brain) matter.

The rudder for that ship is also huge and if damaged, needs the help of the SLPs. They provide the initial therapeutic activities, the habit that it acquired, and the ongoing language activities that become habitual, with less and less effort (and more and more improvement) for the same amount of work.

“We now know that it is by action alone that we can create such habits. By action, we mean the courageous performance of every one of those small actions which lead to a definite end.”
(Payot, 1914).

Speech therapists help start the *sustainable* component of the therapeutic equipment (and motive force) needed for the long journey towards recovery.

They are the rudder within the rudder, helping steer the ship with the interest, support, and stimulation that is needed to establish the long-term therapeutic relationship between them and their PWA clients.

Speech therapists *are* the trim tabs of aphasia recovery! Without them, we would be rudderless.

Signed: *The Johnny Appleseed of Aphasia Awareness*

The Education of the Will; The Theory and Practice of Self-Culture, (1914). Jules Payot,



R. Buckminster Fuller Gravestone, Mount Auburn Cemetery, Cambridge, MA. (photo T. Broussard)