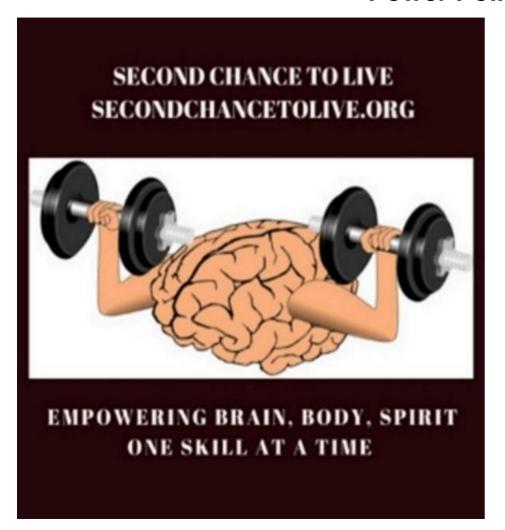
Neuroplasticity, Setting Goals and Creating Hope After Brain Injury and Stroke Power Point Presentation



After we experience a brain injury many things change. Many things that we may not understand. What was once familiar, now seem unrecognizable leaving us discouraged, disillusioned and depressed.

In the process may find ourselves focusing on symptoms instead of on solutions.

Consequently, we may have lost hope. In the process, we may have given up on the dreams that we once had for our lives

In today's presentation, I would like to share something that has helped me to experience hope and create dreams in my life. What I share may help you to experience hope and create dreams in your life.

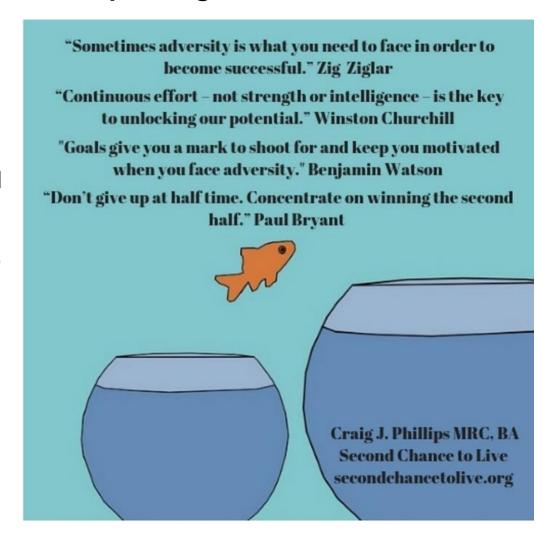
As You Listen to and Watch this Presentation think about a "Way" or "Ways" that You could go About Accomplishing a Goal or Goals.

When a brain injury or stroke occurs, nerve cells at the site of the injury either die or are damaged. Damaged to varying degrees.

Although these nerve cells are damaged, there are healthy cells around these damaged nerve cells.

As I understand neuroplasticity, with repetitive mirrored movements, helps healthy cells reach out to the damaged nerve cells.

In the process, new neural pathways are established and brain reorganization occurs. In the process the brain works to compensate for the brain injury and stroke.



Building Blocks of an Ongoing Recovery Process

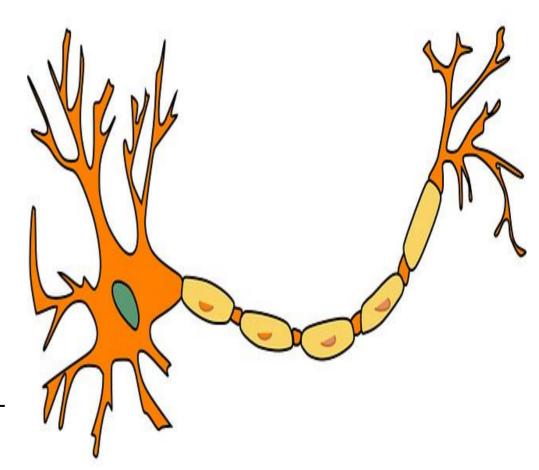
The Nerve

Neurons, Dendrites, Soma, Axons, Myelin Sheaths, Axon Terminals, Neurotransmitters to the next Neuron through its Dendrites.

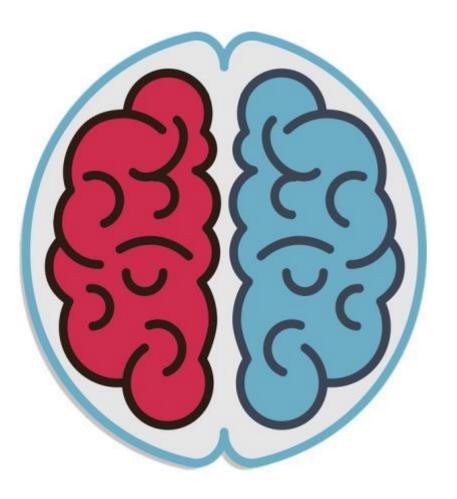
Corpus Callosum

Nerve Bundle that Connects both Sides of the Brain

Facilitates Communication between the two sides – Right and Left Hemispheres – of our Brain



Following a Brain Injury and Stroke -- Right and Left Sides of Our Brain



Following a stroke and brain injury, we may find that skills that once came naturally to us, now are difficult to achieve.

In the process, we may find ourselves both frustrated and discouraged. But there is good news.

We can improve our lives through the benefits of neuroplasticity. One skill and one skill set at a time.

In the process, we can create new neural pathways and brain reorganization.

In the process we can improve the quality of our lives.

Neuroplasticity, Muscle Memory, Coordination and Creating Hope



According to MedicineNet.com definition, "neuroplasticity is the brains ability to recognize itself by forming new neural connections through out life.

Neuroplasticity allows the neurons (nerve cells) in the brain to compensate for injury and disease and to adjust their activities in response to new situations or changes in their environment."

Neuroplasticity or engaging in repetitive mirrored movements using both sides of our body gives our brain the ability to create new neural pathways and engage in a process of brain reorganization.

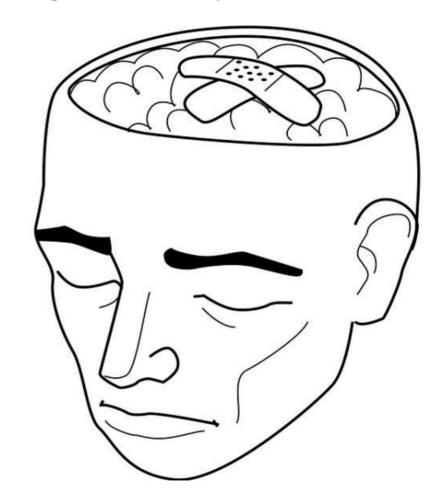
My Brain was Damaged on the Right Side of my Brain

My brain was damaged on the right side, which affected the left side of my body. Therefore I needed to work on my left or the affected side of my body.

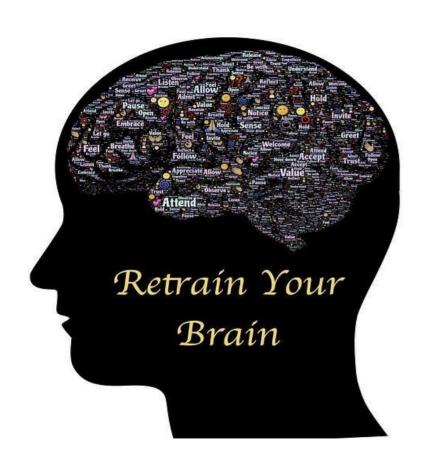
Your brain may have been damaged on the left side which affects the right side of your body. Therefore, you may need to work on the right side of your body.

I remember my Sensei (martial arts instructor) encouraging his students to work on one skill during each class. His encouragement helped me to realize that I could learn how to accomplish skills and skill sets a little at a time.

A little at a time in ways that work for me. Ways that may not work for other people.



Accepting my Limitations but Not Being Stopped by Them



Because I have a difficulty learning sequences of information, I need to do things a "bazillion" times. A "bazillion" repetitions. What this has meant is that I have needed to learn one skill at a time, by doing that skill a "bazillion" times.

Once I learn that skill, I need to work on another skill a "bazillion" times. Once I learn both of those skills I combine them into a skill set that I practice a "bazillion" times. I continue to drill that skill set until I have mastered the skill set.

I then begin to learn other skills (a "bazillion" times) and another skill (a "bazillion" times). I then combine those learned skills into another skill set. Once learned (through another "bazillion" times) I combine both skill sets and drill them together another bazillion times.

Benefits of Not Giving Up on the Process or Journey

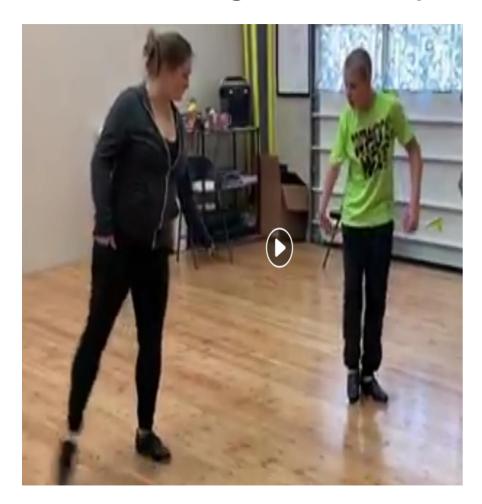
Increasing muscle memory, range of motion, as well as my gross and fine motor skills, has not only improved my abilities in martial arts, but also in other areas of my life.

Areas such as my hand-eye coordination, dexterity, agility, balance, speed, reaction time, precision on both my right and my left (affected and non-affected) sides of my body.

On the next slide is a video presentation that Bambinette Oppegaard Schreckendgust shared on my Facebook page several years ago. With her permission, I am now sharing the video presentation with you. The video presentation is of Tyler, her son, who is now 12 years old.



How a Young Man uses Repetitive Mirrored Movements through Dance



Tyler experienced a traumatic brain Injury at 25 months old after falling out of a window 3 stories up while at a baby sitters.

Tyler is using dance to create new neural pathways and brain reorganization through repetitive mirrored movements.

Tyler is an example and an inspiration. I am proud of you, Tyler. Thank you Bambinette, for sharing this video presentation.

https://www.facebook.com/bambinette.schreckendgust/videos/10218321111076251/?t=8

My Encouragement to You as I Need to Remember



Set a goal of something you would like to accomplish. Then look at how you can achieve that goal, a little at a time.

Ask, what skills and skill sets do I need to learn to accomplish the goal. And give yourself time to learn each skill and skill set as you move toward accomplishing your goal.

My encouragement to you my friend would be to start slow, but start. Learn a new skill and then a skill set. In the process, you will gain a series of small successes.

By doing so you will improve the quality of your life. By doing so you can move beyond a diagnosis or prognosis.

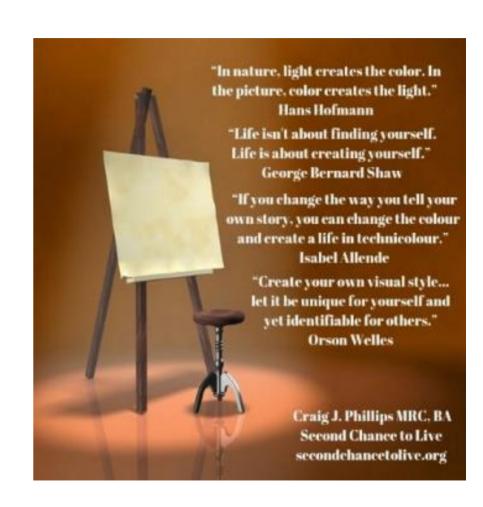
Living Beyond Limitations one Skill at a Time

Doing so you will move beyond the confines of the "box" that some people may be wanting you to remain in "a box" for various reasons.

Through persistence and tenacity, you will be able to accomplish what you never dreamed possible. Skills and abilities that may have been lost due to a stroke or brain injury.

Find a way that works for you. Find a way that you enjoy and build a program to increase your capabilities, despite your stroke or brain injury.

I have used martial art disciplines to create new neural pathways and brain reorganization. You may like to use another form (skills and skill sets) to create new neural pathways and brain reorganization.



Have Fun with the Process. What you Enjoy doing You will Stick with through times of Discouragement.



Have Fun with the Process. What you Enjoy doing You will Stick with through times of Discouragement.

Although Progress may Seem Slow at times, Don't Give Up. You are Making More Progress that you Realize.

"The journey of a thousand miles begins with the first step." Lao Tzu

"Once we start walking, before long we will be able to look back and see how far we have come, because we did not give up." Craig J. Phillips MRC, BA

Exercise to Learn and Re-Learn Skills One Skill and One Skill Set at a Time

Whatever you are able to do with the unaffected side of your body, mirror on the affected side of your body. Start out slowly, but be persistent in your commitment.

Work on one part (drill) of the skill at a time. As you become comfortable with that particular part of the skill, move onto the next part of the skill.

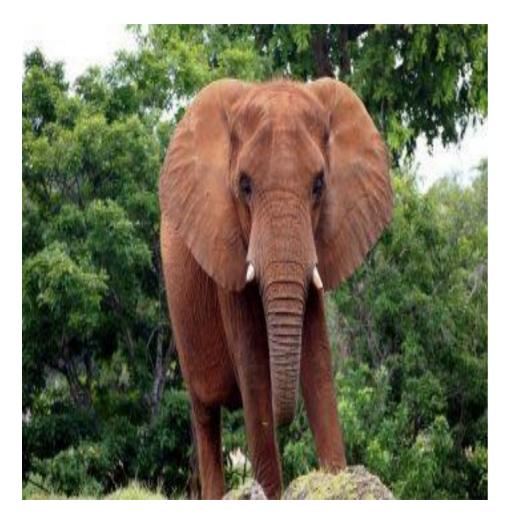
By combining the skills into a skill set (small successes) you will find that you have moved closer to accomplishing your desired goal.

And as I have found, by doing so you will be able to learn or relearn skills and skill sets. In the process, you will create new neural pathways and brain reorganization. In the process, you will improve the quality of your life through the small successes that you achieve.

Although You May Feel Stuck at Times, Don't Give Up Keep Searching and You will Find Your Way A Way That will Guide You to Your Dreams



The Process Just takes Time so Don't Give Up



Achieving Your Goal – Don't be Discouraged Riddle

"How do you eat an elephant?", one man said to the other. The man asked, "Tell me the answer". He responded, "One bite at a time".

My encouragement to you my friend — as I need to remember too — start chewing and don't give up. Consume your "elephant" one bite, one skill and one skill set at a time.

By eating your "elephant" one skill and one skill set at a time, your elephant will be consumed. Your "elephant" or goal will be consumed or achieved through small successes.

My Process and Journey using the Principle of Neuroplasticity after Brain Injury



In 1997, unknowingly, I began the process of creating new neural pathways and brain reorganization through repetitive mirrored movements. Mirrored movements through learning, drilling and developing in different martial art skills.

Repetitive mirrored movements using both the affected and non-affected sides of my body. My arms, hands, elbows, legs, knees, and feet on my right and left (as well as engaging my core -- stomach and lower back muscles).

In the process, of using these repetitive mirrored movements I developed muscle memory. I developed an increased range of motion, gross and fine motor skills, as well as balance, agility, hand-eye coordination and coordination.

My Journey in Repetitive Mirrored Movements to Create New Neural Pathways

I started training in muay Thai kickboxing in 1997. Muay Thai (Thailand's national sport) is called the art of 8 limbs, using Hands, Elbows, Knees and Feet on both sides of one's body.

Since beginning my training in muay Thai kickboxing I have trained (drilled) in different martial art disciplines [Western Boxing, Filipino Stick Fighting, Kali, Wing Chun and Grappling].

I have used these different martial art disciplines, through repetitive mirrored movements on both sides of my body (affected and non-affected), to create new neural pathways and brain reorganization to engage both sides of my brain and body.



The Art of 8 Limbs to train Large/Small Muscle Groups -- Gross/Fine Motor Skills

In October 2013 I did a Keynote Presentation at the Southwest Conference on Disability in Albuquerque, New Mexico. During that keynote presentation I shared a video presentation. In preparation of the keynote presentation a friend videotaped these skills. Other friends have helped me by video taping my process in subsequent years.

Click on the Blue Links to watch the Presentations

Using Gross Motor Skill Crossing the Centerline

Neuroplasticity through Martial Arts 2013 https://www.youtube.com/watch?v=snHjkxYrRYU

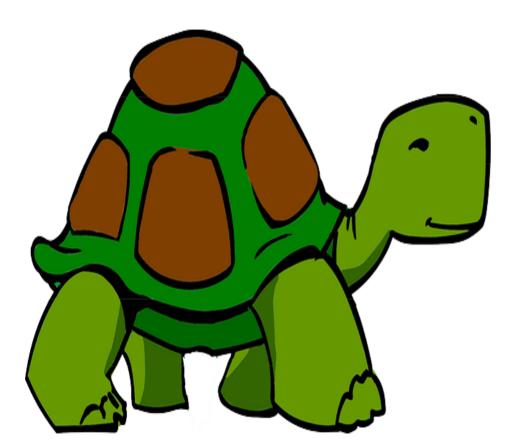
Neuroplasticity through Martial Arts 2014 https://youtu.be/sV82V2y-Jrk

Using Fine Motor Skills Crossing the Centerline

Neuroplasticity through Martial Arts 2018 https://www.youtube.com/watch?v=syCBmRi-P3E



Little by Little We can Achieve What We never Dreamed Possible



Little by little, we can achieve what we never dreamed possible.

In the process, we can make progress a little at a time.

In the process, we can begin to celebrate small successes.

Celebrate our successes without judging our efforts.

Aesop's Fable of the Tortoise and the Hare

Slow and Steady wins the Race

The Principle of Baking Cakes and Eating Elephants

Life Goals

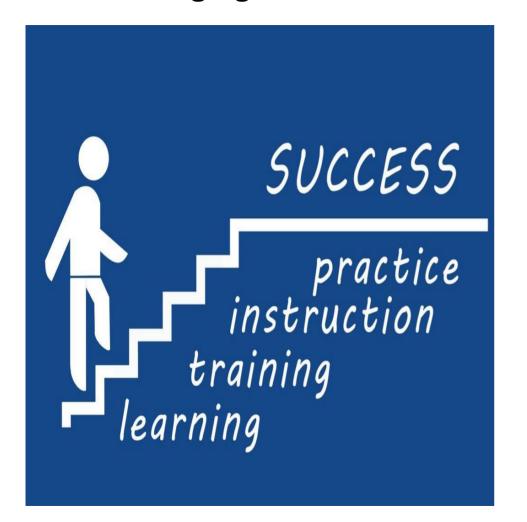
Living life and achieving goals can be likened to baking a cake. Baking a cake one ingredient at a time, by combining acquired ingredients.

Living life and achieving goals can likened to eating an elephant. Eating an elephant one bite at a time through deciding to keep "chewing".

Living life and achieving goals can be likened to learning one skill and skill set at a time. Learning skills and skill sets in combination through repetition.



Not Judging our Efforts to Achieve One Goal a Little at a Time



Learn a new skill and skill set through a series of small successes.

By doing so we will improve the quality of our lives.

By doing so we can move beyond a diagnosis or prognosis.

By doing so we will move beyond the confines of any "box".

By doing so we will improve the quality of our life and well-being.

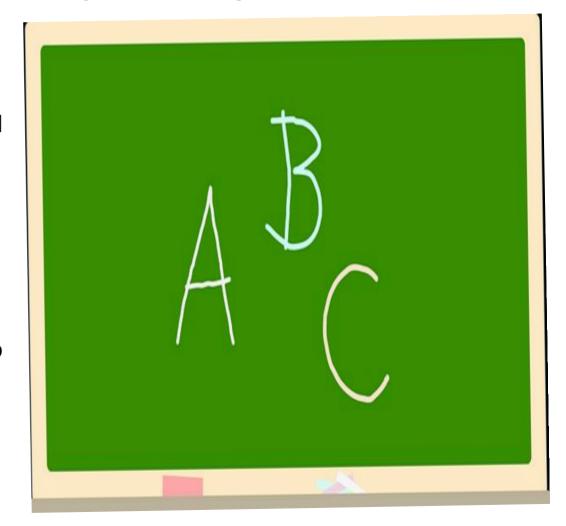
The Metaphor of a Training Camp to Experience Hope and Create Dreams

Like that of Football or UFC Training Camp

Training camps prepare and give you and I the ability achieve new skills, skill sets and goals.

Life lessons and experiences provide many training camps. How we succeed in life is determined by how we respond in these training camps.

And as with any training camp, those who participate in the camp must dedicate themselves to the activities of the training camp.



Defining the Basics of a Training Camp to Achieve Our Goals



When the individual makes the decision to persevere in the face of discouragement and setbacks, character is formed in the individual.

Character empowers the process. Character enables the individual to grow and develop in ways that once seemed to be out of their reach.

Character is established on a foundation of humility. Apart from humility, progress will be eclipsed by arrogance, that interrupts learning.

Arrogance interrupts progress as the individual becomes resistant to learning. Arrogance, in effect, closes the eyes, ears and heart of the participant.

Ingredients of a Training Camp to Achieve

Hard work or Work-ethic

"Something requiring lots of effort to do, either physical, mentally or emotionally; labor; toil." Your Dictionary.com

Hard work to me means being diligent, to accomplish a task or a goal. Hard work or a work-ethic can be likened to running a marathon, not running a sprint.

"If you advance confidently in the direction of your dreams and endeavor to live the life that you have imagined...you will meet with a success unexpected in common hours." Henry David Thoreau



Ingredients of a Training Camp – Commitment



"a willingness to give your time and energy to something that you believe in, or a promise or firm decision to do something" Cambridge Dictionaries online

Commitment to me involves loyalty, first to myself.

Commitment encourages me to stick with a goal, regardless by finding a way that works for me.

Although the way that I set out to accomplish some thing may change, my commitment teaches me that I can find a way that will work for me to be able to accomplish my goal.

"Regardless of Your Lot in Life You Can Build Something Beautiful On It." Zig Ziglar

Ingredients of a Training Camp – Determination

"is a positive emotion that involves persevering towards a difficult goal in spite of obstacles.

Determination occurs prior to goal attainment and serves to motivate behavior that will help achieve one's goal." Wikipedia

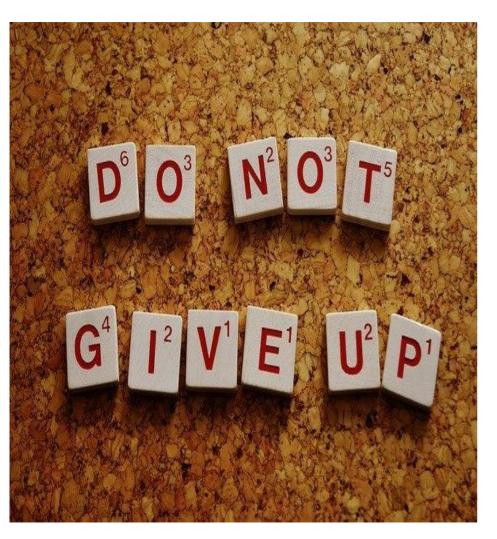
Determination helps me to focus on what I want to accomplish, in spite of obstacles and setbacks.

Obstacles become a sign on the road that helps me to realize that adjustments need to be made to accomplish my desired goal.

"I have not failed. I've just found 10,000 ways that won't work." Thomas Edison



Ingredients of a Training Camp – Drive



"There are three major components to motivation: activation, persistence, and intensity. Activation involves the decision to initiate a behavior...

Persistence to me is the continued effort toward a goal even though obstacles may exist...Finally, intensity can be seen in the concentration and vigor that goes into pursuing a goal." About Education — What is Motivation

Motivation can either be external or internal. External motivation only last until the threat is removed. Internal motivation is sustainable because of the individual's internal desire to achieve.

"Success is almost totally dependent upon drive and persistence. The extra energy required to make another effort or try another approach is the secret of winning." Denis Waitley

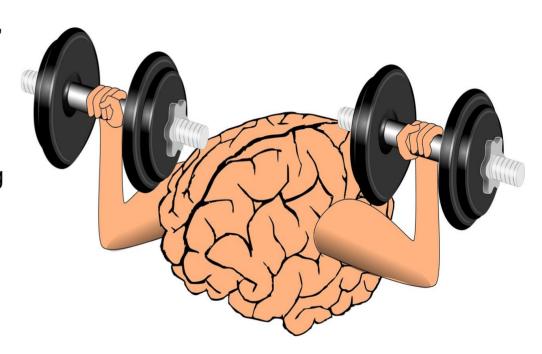
Ingredients of a Training Camp — Discipline

"training to act in accordance with rules; drill, activity, exercise, or a regimen that develops or improves a skill, the rigor or training effect of experience, adversity"

Dictionary.com

For me, discipline means that I keep working on my craft, tweaking and taking away; adding to and making what works, work for me.

"Discipline is the bridge between goals and accomplishment." Jim Rohn



Ingredients of a Training Camp - Fortitude



"Fortitude meaning courage or bravery is the ability and willingness to confront fear, pain, danger, uncertainty, or intimidation."

Wikipedia

For me fortitude means that I commit to pursuing my dreams and my destiny. That I stay focused on my vision and mission.

That I remain true to myself.

"Fortitude is the marshal of thought, the armor of the will, and the fort of reason." Francis Bacon

Ingredients of a Training Camp – Persistence

"the quality that allows someone to continue doing something or trying to do something even though it is difficult or opposed by other people" Merriam-Webster

For me persistence is the decision to get up more times than I fall down. Persistence for me means that I don't give up regardless... Persistence means believing in myself.

"Persistence and resilience only come from having been given the chance to work though difficult problems." Gever Tulley



Ingredients of a Training Camp – Tenacity



"an unwillingness to yield or give up, being dogged, stubbornly, persevering and steadfast" Wiktionary

Tenacity keeps me moving toward what I want to accomplish in my life. Tenacity means that I keep looking for ways to win in life.

Tenacity means that I do not give up.

Instead, I choose to make adjustments to find a way that will work for me.

Tenacity means that I trust the process, a loving God and myself. Tenacity means that I keep moving forward, do the footwork and let go.

"It's not that I'm so smart, it's just that I stay with problems longer." Albert Einstein

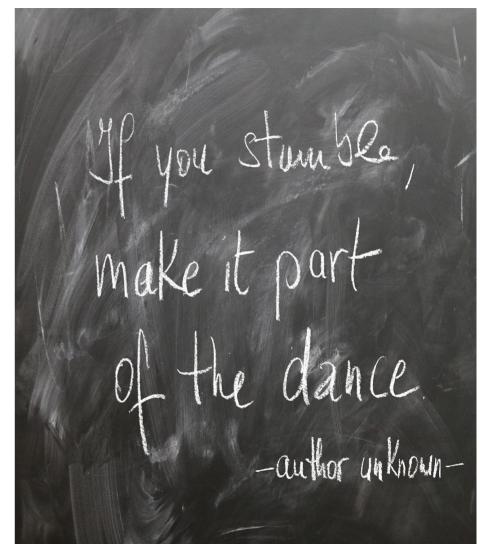
Ingredients of a Training Camp – Courage

"The state or quality of mind or spirit that enables one to face danger, fear, or vicissitudes with self-possession, confidence, and resolution; bravery." The Free Dictionary

Courage to me means I stay committed to the process, the footwork and the journey.

Courage helps me to remember that I do not have to do things perfectly.

"Your time is limited, so don't waste it living someone else's life. Don't be trapped by dogma – which is living with the results of other people's thinking. Don't let the noise of others' opinions drown out your own inner voice. And most important, have the courage to follow your heart and intuition." Steve Jobs



Take the First Step, Keep Walking and Don't Give Up



"The journey of a thousand miles begins with the first step." Lao Tzu

"Once we take that first step and keep walking before long we will be able to look back and see how far we have come, because we did not give up." Craig J. Phillips MRC, BA

"Insist on yourself; never imitate. Your own gift you can present every moment with the cumulative force of a whole life's cultivation; but of the adopted talent of another you have only an extemporaneous half possession. Do that which is assigned to you, and you can not hope too much, or dare too much. That which each can do best, none but his Maker can teach him."

Ralph Waldo Emerson

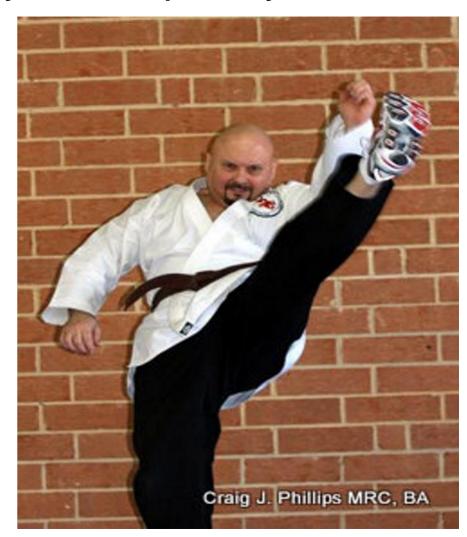
My Process, Use and Journey with Neuroplasticity

Little by little I have been able to achieve in my body what I never before dreamed possible. I have done so by learning one skill at a time through a engaging in bazillion drills.

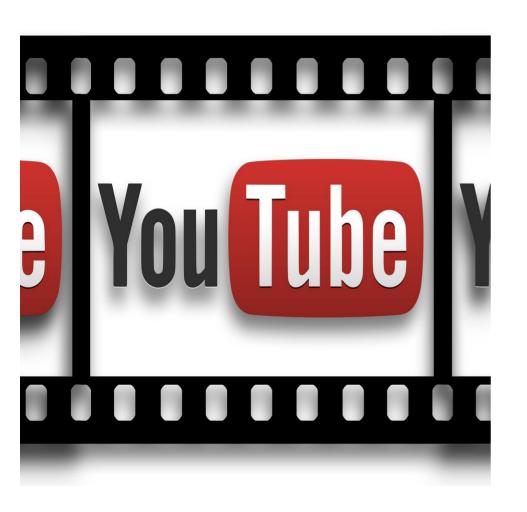
Once I have learned that skill, I work on developing another skill through another bazillion drills. I then work to combine both skills into a skill set.

I then repeat the process by learning new skills and skill sets. By combining skills and skill sets through a bazillion repetitions I become more proficient in my abilities and capabilities.

In the process, I create hope in my life.



My use of Neuroplastity in 2013, 2014, 2015, 2016, 2017 and 2018



On the next slide of this presentation there are links to demonstrations.

Friends helped me to show and document the progress that I have made by continuing to use repetitive mirrored movements.

Years the Video Presentations were Made

2013 – 5 minutes long

2014 – 2-3 minutes long

2015 - 2-3 minutes long

2016 – 2-3 minutes long

2017 – 5 minutes long

2028 - 46 seconds long

Below are Links to Demonstrations of my Ongoing Use of Neuroplasticity in my Ongoing Brain Injury Recovery

Click on the Below links to Watch these Demonstrations

Neuroplasticity through Martial Arts Disciplines August 2013

Neuroplasticity Demonstration August 2014

Brain Injury, Neuroplasticity and Personal Gains August 2015

Balance and Coordination through Repetitive Mirrored Movement 2016

Brain Injury Recovery and Repetitive Mirrored Movements 2017

Improving Our Brain and Body's Ability to Excel after Brain Injury 2018