

## LEARNING, UNLEARNING & RELEARNING

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### SUMMARY

The brain is not prepared to face the world at birth. The human brain requires social interaction, a basic human need, to learn and develop. Ironically in education the opportunity for social interaction that the brain craves is often missed. The brain has an incredible capacity to learn new things all the time and it is extremely curious. That curiosity forms the basis for the learning, unlearning, and relearning process. This paper explores the concepts of learning, unlearning, and relearning, and their significance in individual development.

**Keywords:** Neuroplasticity, Unlearning, Relearning, Cognitive Flexibility, Growth Mindset, Emotional Intelligence, Positive Emotional Attractors, Habit Loops, Neuroscience.

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## 1. INTRODUCTION

Brain development is underpinned by experience and learning from others. Higher education, usually adult learners, require better understanding of unlearning and relearning processes. Education at present isn't designed with the brain in mind, in many ways it is contradictory. Evidence based pedagogy that integrates neuroscientific insights has uncovered several proven reasons that educators, students, parents and others should take heed. Learning after all is basically the process of hardwiring information that is heavily influenced by what is taught and experienced. Unlearning involves purging some of the connections in the brain network, such as limiting beliefs, mindsets, behaviors, or actions. Relearning is bringing awareness to taking on new or better-informed information, updating beliefs, mindsets, thoughts, or behaviors in an intentional way.

## 2. THE PROCESS OF LEARNING, UNLEARNING, AND RELEARNING

Understanding the benefits of staying open to new perspectives and information allows individuals to challenge current knowledge and unlearn outdated input that is no longer valid or relevant. People must be encouraged to reflect and apply critical thinking to analyze and evaluate new information, then adapt or modify as necessary, whether it's a mindset shift and/or behavior change to the new reality. Adults learners have many years of knowledge influenced by lived experience and of social pressures. The layers of accumulated information that impact their habits, mindset and belief system mostly unknown to them and long forgotten.

New learning requires being intentional and devising an action system that supports new habits built on rehearsal, practice and feedback. It demands honing curiosity into problem-solving, creativity, and decision-making. Staying curious requires noticing what one notices, but beyond that, it requires cognitive flexibility. Cognitive flexibility is the ability to control what one decides to give attention to and the duration of focus. Attention is the gateway for any learning to take place. If attention is misdirected, learning can get stuck (Dehaene, 2020:149).

## 3. NEUROPLASTICITY

Neuroplasticity, the brain's capacity to reorganize itself by establishing new neural connections, is the foundation for unlearning and relearning, as indicated by neuroscience. Scientific research has established that each time we encounter a new learning experience a new pathway opens, and subsequent repetition can override the old pathway.

"The illiterate of the 21st century will not be those who are unable to read and write, but those who are unable to learn, unlearn, and relearn," as stated by the American writer, futurist, and businessman, Alvin Eugene Toffler. Neuroplasticity posits that the mental models and patterns we have relied on for as long as we can recall are neither permanent nor fixed. The concept of growth and fixed mindsets was coined by psychologist Carol Dweck in her 2006 book, *Mindset: The New Psychology of Success*. Her research has led to the creation of a new field in educational psychology—achievement goal theory. Dweck's most important findings—proposes that there are two types of mindsets that children (and adults) can have about their intelligence and abilities.

The mindset that is fixed often believe that they have a limited amount of abilities, talents and intelligence that they are born with. "They have only a certain amount, and that's that," says Dweck. As for the growth mindset individuals, they believe that intelligence and abilities can be developed and cultivated throughout their life. "People with a growth mindset don't think everybody's the

same," cautions Dweck, "but they believe that everyone—through effort, dedication, schooling, experience—can grow."

### ***Importance of Insights***

Working with both professionals and students, the subject of unlearning is extremely difficult for them to navigate, as they have established a pathway of thought or action that has left them feeling frustrated. The brain is quite lazy, which is why it continues to pursue habits that necessitate less mental energy. However, a path forward is frequently revealed when unlearning is presented within the context of neuroscience.

The concept that change and relearning can be established by engaging with an optimistic and inspiring vision of oneself in an ideal change situation is underscored by the reputable research of Dr.

Richard Boyatzis on Positive Emotional Attractors (PEA) and Negative Emotional Attractors (NEA). Dr. Boyatzis Intentional Change Theory (ICT), ICT posits that change is an iterative process involving five stages: (1) discovering the ideal self, (2) exploring the real self, (3) developing a learning agenda, (4) experimenting with new behaviors, thoughts, and feelings, and (5) practicing these new behaviors to integrate them into one's identity.

According to Anita Howard (2006), the positive emotional attractor (PEA) triggers constructive cognitive and physiological responses that enhance an individual's motivation, effort, optimism, flexibility, creative thinking, resilience and other adaptive behaviors. The negative emotional attractor (NEA) triggers another process by calling attention to current social and environmental stressors that may compromise an individual's effectiveness. Dr. Boyatzis also emphasizes the importance of contemplating the discomfort of one's current circumstance, which is the reality of the situation.

People may discover that the NEA could create a sense of urgency for change, as the repercussions of maintaining the current state are overwhelming. When PEA & NEA are established by individuals and documented, helps to uncover gaps between desired change and reality. This can be used to help prompt pathways to the desired outcome and certainly many individuals gain insight on which values, beliefs and mindset are required to move forward, resulting in an intentional plan and actions that can be developed, monitored and motivating.

### **4. CASE STUDY: A FORMAL CLIENT - MANAGER'S JOURNEY**

For instance, a manager I coached discovered that her pre-COVID-19 management style was difficult to adapt to a post-COVID-19 world. Her style was characterized by managing-by-walking-around, in-person supervision, rigid task management, and charisma through face-to-face communication methods. The manager was required to relearn and abandon the habits that had contributed to her success, which were the primary instruments that had propelled her to her current leadership position. She had to learn new methods of communication, including informal check-ins that foster trust, and implement videoconferencing applications. In a new flexible working environment post-COVID-19, she acquired evidence-based tools to begin identifying her personal leadership patterns, a process known as relearning, with the assistance of neuroscience and coaching. She gained insight into the fact that her abilities were not fixed by employing principles derived from the growth mindset.

Furthermore, she became cognizant of her inner voice and limiting beliefs, which were reflected in her "fixed" approaches to work.

Resilience was developed through the application of a growth mindset, practice, timely feedback, and the confidence to fail forward. The manager relearned the principles of a growth mindset, the value of empowering her team to take ownership, and the importance of not being a victim of her limiting beliefs and the idea that she had to be in control of every outcome of her project through both reflection and targeted exercises.

The neuroscience that underpins the unlearning and relearning breakthrough was the knowledge she acquired regarding the critical role that emotions play in all of our actions. Emotional intelligence instruments facilitated the understanding of how to more effectively respond to stress and uncertainty.

In order to improve her management, she also relearned self-regulation and co-regulation by demonstrating composure in a chaotic work environment.

Team trust and collaboration were enhanced over the course of several months. It was evident to all that her relearned, transformed leadership style was further ingrained in her new reality as a result of the deliberate practice and reflection that she engaged in while working with her.

## 5. SUPPORTING STUDENTS

The most significant challenge for the majority of international students, in my view, is not the course material or language challenges, but rather the feeling of being overwhelmed – cognitive overload.

While some students have some level of awareness about burnout, culture shock, and other psychological dynamics to blame for their challenges to focus, keep up, and feelings of depression, what frequently goes unnoticed is that their previous study patterns do not need to be altered. Often students in higher education have had gap years and struggle to find strategies to support a work, family, and student lifestyle.

A significant amount of tension is generated when learners rely excessively on outdated techniques and strategies such as memorization and cramming, which often result in subpar grades or outcomes. Frequently, students experience feelings of frustration toward their instructors, institutions, and themselves. This results in a sense of immobility, self-doubt, and a loss of confidence.

Many learners may find it useful to first comprehend the neuroscience of neuroplasticity in order to unlearn study practices. It can be highly beneficial to raise awareness of the brain's learning process, the effects of stress, the principles of growth mindset, and some coaching tools. Many individuals require assistance in relearning how to reason analytically and study more deeply.

A former student who prided himself on being hard-working and being the first to answer and share his ideas in class believed this was his idea of a smart student. Nevertheless, the student's acquired individual style became a problem when he was assigned to collaborate on team projects. He promptly expressed his desire to work independently. He also would encourage his peers to request individual grades for their individual contributions to the project. The student was unable to comprehend that in an interconnected world, he would likely need to collaborate more than he would like to. By bringing awareness to his dependence on individual performance metrics and providing relearning strategies that included diversity of ideas, research on our social brain, and working through group as well as individual coaching exercises, his learning shifted. He became more at ease with team projects and is now better aware of what his brain is experiencing so he can self-regulate and give attention to his mindset.

## 6. PROCESS OF UNLEARNING AND RELEARNING

**Step One:** Consider questioning, what may be required to be unlearned? Is it feeling unable to progress, overburdened, or unable to create momentum?

**Step Two:** Analyze Habit Loop. Our brain has a preference for patterns, as evidenced by neuroscience research. It favors repeating the same action in order to circumvent tasks that require a significant amount of cognitive energy. Identify the portion of a pattern that requires relearning by reflecting and observing the habit loop. The habit loop consist of three areas, 1. Cue (trigger), 2. Routine (behavior or action) and 3. Reward (The feedback).

**Step Three:** Make a bodacious vision of the ideal self.

Change is a significant undertaking. Neuroscience suggests that PEAs, which are optimistic, inspiring visions of our ideal selves that are truly attainable, can facilitate the transformation process. The phrase

"keep your eyes on the prize" may be familiar to you. This implies that you give less attention to objects that are not within your field of vision.

**Step Four:** Neuroplasticity - the process of rewiring our brains with each experience necessitates a significant amount of patience, feedback, and repetition. Begin with a tiny, manageable change that does not require a significant amount of time or energy, and remember to reward yourself.

**Step Five:** Feedback – the process of providing the brain a sense of certainty and direction of focus. The brain replaces new neural pathways as we relearn and fades out old, obsolete pathways.

According to Kutasi (2023), feedback's primary goal is to help individuals reach their learning objectives by pointing out their strengths and recommending areas for development. Additionally, feedback encourages active learning, which raises engagement. People are motivated to review their work and make corrections when they receive quick and constructive feedback.

## 7. CONCLUSION

In conclusion, the ability to learn, unlearn, and relearn is crucial for personal and professional growth. However, Neuroscience shows that our brains are capable of remarkable adaptability at any age, driven by curiosity and cognitive flexibility. Whether you are a professional feeling stuck in a fixed mindset, a student pursuing advanced studies, or an individual seeking change, the initial step is to decide. Bodacious intentions require bodacious action.

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