# OUR LEARNING BRAIN

Engaging Your Brain for Learning & Habit Change

**Ebook 1** of the MAXIMISING BRAIN POTENTIAL series

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### **FOREWORD**

As Professor of Psychology at Trinity College Dublin and the Founding Director of the Institute of Neuroscience Trinity College, Dublin, I co-supervised Celine while she was a PhD student. Celine was always an ambitious and independent thinker. Her work since then – and some of it now available to you, the reader, in the MAXIMISING BRAIN POTENTIAL series – is no different.

In this first ebook, Celine draws on newly-published knowledge about the brain's role in habit to explain the complexities of the brain in the learning and habit change process. Her ability to translate this complex science into easy-to-understand prose means that readers of all backgrounds will be able to grasp the brain's role in making changes and learn how to implement these changes for themselves. This ebook is also well-suited for those at management levels who want to make learning a priority for their staff.

I can think of no one more qualified to write this ebook, as Celine has been putting the theories in this ebook into practice in her work for many years with the company she founded: Adaptas, a learning and development business through which Celine has successfully coached and facilitated learning in thousands of leaders and teams worldwide – from Ireland and the UK, to North America, to Africa. Her form of training is unique and receives exceptional reviews, with many people saying they wished they had learned this information "10 years previously". Her clients deliver overwhelmingly positive reviews, expressing appreciation for Celine's ability to "create a safe space" and create "amazing outcomes".

With this ebook, Celine brings to the reader the science and theory that drives her successful training. Celine's insights should not be overlooked.

**Professor Ian Robertson** – Clinical Psychologist and Neuroscientist, Author of *The Stress Test: How Pressure Can Make You Stronger and Sharper; The Winner Effect: The Science of Success and How To Use It; Mind Sculpture: Your Brain's Untapped Potential; The Mind's Eye: An Essential Guide to Boosting Your Mental Power* 

#### A NOTE FROM THE AUTHOR

The only skill that will be important in the 21st century is the skill of learning new skills. Everything else will become obsolete over time.

#### Peter Drucker

As a psychologist and coach working in organisations worldwide and with individuals, groups and teams, I have noticed over the past 10 years plus that very few new discoveries from neuroscience are being integrated into education, learning and development or soft skills programmes. As someone who works to help people maximise their potential in a range of organisations and educational institutions, I believe that many eager and dedicated people are missing out on vital tools for life and leadership.



Enough is enough. So much money is being spent on soft skills education in organisations. Yes, it is wonderful that decision-makers have recognised the value and importance of learning for success. But the problem is that most people attend great courses, workshops, programmes and then nothing or very little changes in their behaviour. There are many reasons for this that might surprise you and that are covered in this short book. Time and time again, in recent years I see the difference that knowing this information makes to a persons commitment to change and to their own long-term behavioural change.

Reading this ebook will help you to see learning from a new perspective. Awareness of the concepts in this ebook will help you to open up to learning new things and enable you to maintain the elements that make long-term behavioural change possible.

How do I know this works?

With my clients over the years, I have learned by observing what is effective and what is not in creating change. People who have taken on this information have made long-term behavioural change, while those who have not taken it on board have not had the same success.

This ebook is the first in the MAXIMISING BRAIN POTENTIAL series. The MAXIMISING BRAIN POTENTIAL series is based on the most up-to-date scientific research of how our brain potential can be maximised for habit change, learning, productivity and health. This series of ebooks pulls this information together into digestible chunks. The others in the series include DEVELOPING LEARNING ADDICTS: THE 7 STEPS TO LEARNING & HABIT CHANGE and CHANGE BEGINS HERE: BUILDING THE

**FOUNDATIONS FOR LEARNING & HABIT CHANGE**. These ebooks both introduce additional concepts and also probe deeper into some of the topics discussed in this ebook.

Similar to the current wave of just-in-time learning, where learning is available on-demand, and can be accessed when the learner needs it, the MAXIMISING BRAIN POTENTIAL series of ebooks is just-what-you-need-to-know-to-make learning-easier in adulthood.

I know that this text will be useful for you, whether you want to make a change in your own life, or you are involved in helping others learn and make change.

If you would like more, we also have workshops and an online course available to help guide you through a process to maximise your brain potential. Contact <a href="mailto:info@adaptastraining.com">info@adaptastraining.com</a> for information.

Dr. Celine Mullins, Adaptas

#### **ACKNOWLEDGEMENTS**

This may be a short ebook but it takes a long time and a lot of people to create something that has real clarity and actually gets to the point of publication!

Without the assistance of Diana Friedman and Enda Hughes, this text would not make half as much sense as it does now. Their patient reading, editing, re-reading, and editing, as well as encouragement and advice, is hugely appreciated. The process has taught me much about how writing is re-writing and re-writing is writing!

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Thank you to Claire Comerford and Enda Hughes for pushing me out of my comfort zone and encouraging me to do more with this text, beyond my original plans.

Thank you also to Sinead Kennedy, Eve Bulman and Niamh Ni Dhonaill, whose encouragement did not go unnoticed!

And a final thank you to my clients. I share some examples of clients I have worked with but have changed some names and small details to protect their anonymity.

# WHY READ THIS EBOOK?

#### This ebook will:

- Help you to use your brain more effectively when learning new skills, by offering simple and practical tips.
- **→** Support you in **breaking old habits and creating new ones**.
- → Give you great insights into **organisational learning and development**-related topics that you can use in your organisation.

#### INTRODUCTION

The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn and relearn.

#### Alvin Toffler

Are you a leader who recognises that learning is one of the main keys to business success? Are you working in a Learning & Development or Talent Management role? Are you trying to change habits to be more successful at work or to live a healthier life? If any of these traits or roles describe you, then you have come to the right place.

We all recognise the speed of change that is happening around us. Our working roles will look dramatically different in the very near future. For example, due to the elements of the working day that are being replaced by Artificial Intelligence, it is predicted that many of us will need to retrain perhaps many times in our lifetime. Keeping our brain functioning properly and performing efficiently is worth some serious thought. The period of accelerated change we are living through at the moment requires higher levels of learning agility than ever seen before. We will all have a lot of learning to do throughout our adult working lives.

Some of us are naturally motivated to learn and change how we do things. But for many of us, initial motivation is only short-lived. Children soak up learning from the people and environment they are surrounded by. You will probably have already recognised that learning doesn't feel quite as simple as when you were a child. Why? Because by the time you reach adulthood, much of your behaviour consists of habits. These habits allow your brain to conserve energy, but also make learning a challenge.

In recent years, scientists have made many exciting and ground-breaking discoveries on how the brain learns and changes throughout adulthood. However, much of this recent research from neuroscience, physiology, psychology and more is not being implemented into how we learn as adults. This ebook seeks to change that.

As you will see in this ebook, your brain changes throughout adulthood and must be consciously harnessed in the direction you wish. The perspective on how our brain functions covered in this ebook forms the very basis of how we can best learn and, in my opinion, needs to be at the foundation of all learning. The purpose of this ebook is to help support your learning journey and the learning journey of those around you.

Briefly, there are three main elements to consider:

- Adult learning is habit change and old habits die hard.
- → Understanding how our brain functions is a vital tool for learning.
- → The brain is focused on energy saving and that energy saving blocks us from doing things differently.

# **Adult Learning is Habit Change**

'Learning' and 'habit change' are inextricably linked. You have lots of habitual routines that block you from replacing older ways of operating. People seldom consider the connection between habit and learning when they wish to make a change in their own life or in helping others learn and make change. But when you are learning something new, you need to keep the brain focused and you need to repeat new actions to overcome old ways of doing things – habits. Otherwise, long-term behavioural change does not occur. **Chapter 1** explains this important relationship between learning and habit change.

# **Understanding How our Brain Functions is a Vital Tool for Learning**

Having an understanding and mental picture of how our brain is functioning is in itself a vital tool to allow you to make changes in the brain because it gives you a sense of perspective. It allows you to feel like you are stepping outside of yourself and seeing what is happening inside the 'control centres' of the brain. The very fact that you are now reading this ebook and embarking on seeing the brain in your mind's eye means you are already visualising learning differently. **Chapter 2** will assist you with this process.

# The Brain is Focused on Energy Saving

The area of the brain that creates automatic behaviours is your greatest friend – but also your greatest foe. Our brain creates habits to let us go about our days, doing much of what we do automatically and with little thought. This saves brain energy and frees up your brain for other important tasks like logical analysis. The problem comes when we try to learn something new, as older information and habits are embedded. These habits take some effort to undo! Adults have less time and often less energy than children, and so adult learning requires a lot more conscious effort than childhood learning. **Chapter 2**, as well as helping you understand how your brain functions in learning and habit change, also explains how the biological drive for self-protection can hinder your learning.

The objective of this ebook is not just to give you an understanding of the brain, learning and habit change. The objective is to activate that understanding as a fundamental mechanism to learning. And therefore, **Chapter 3** provides you with strategies to help make learning happen in a much more effective way, by overcoming the brain's self-protection mode.