Back to School Issue: The Way our Brain Changes as We Pursue Lifelong Learning By Michelle LaBrosse, CCPM, PMP®, PMI-ACP, Chief Cheetah and Founder of Cheetah Learning, and Megan Alpine, CCPM, Co-Author

Isn't it amazing how in just a few years a child can go from verbally expressing themselves only through ear-piercing cries, to communicating effectively with adults using a wide vocabulary? As children grow and accumulate new knowledge, their brains are physically changing, too. Every new piece of information and experience a child has shapes the way their brain develops - this is called "brain plasticity."

Dr. Eric Chudler, Executive Director for the Center for Sensorimotor Neural Engineering at the University of Washington, offers this metaphor:

[I]magine making an impression of a coin in a lump of clay. In order for the impression of the coin to appear in the clay, changes must occur in the clay -- the shape of the clay changes as the coin is pressed into the clay. Similarly, the neural circuitry in the brain must reorganize in response to experience or sensory stimulation. (2014)

The effects of brain plasticity are most obvious in children, who encounter new information and sensory experiences every day. The good news is that our brain remains "plastic" throughout our life - though in different ways than during childhood.

Dr. Kurt Fischer, education professor and director of the Mind, Brain, and Education Program at Harvard University, finds, "[t]he brain is remarkably plastic. Even in middle or old age, it's still adapting very actively to its environment." This is to say, if we put ourselves in new environments and seek out new experiences in adulthood, our brain undergoes physical changes.

Our brain's neural networks - neurons that communicate with each other through "synapses" (electrochemical signals) - change as we use our brain to learn a new language, reminisce on the past, or even perfect a yoga pose. As we repeatedly practice a new skill and engage in learning, pathways form between our neurons; these pathways become "wider" and more well-developed the more our brain uses them. Neurologist and educator Judy Willis explains, "Practice makes permanent. The more times the network is stimulated, the stronger and more efficient it becomes."

Similarly, if we stop learning new information or developing new skills, these connections weaken. Recalling memories, for example, can become more difficult if you are out of practice. This is why it is so important to commit yourself to making learning a lifelong practice.

Learning new skills and knowledge throughout your adult life has benefits beyond just the particular content of what you're learning; it helps strengthen the neural networks in your brain to keep your mind in peak performing condition.

We design every course at Cheetah Learning to help people get and keep their brains in peak performing condition. Success is a great reinforcer - when you achieve true mastery in a skill, you like to keep doing it again and again and again. This in turn helps you become even more successful. There are ways to make it easier to achieve success - which is what we do in the Cheetah Certified Project Manager (CCPM) program. People who become a CCPM learn how to use their innate strengths to master the critical skills of learning, Project Management, and negotiations to pursue and achieve any goal they set their minds on.

As a CCPM, you'll significantly improve your skills in Project Management and negotiating, which will help you develop both professionally and personally. However, here at Cheetah Learning we feel that the most important skill you gain from the CCPM program is discovering how you best learn. Once you understand your intrinsic motivations for learning new information or skills, you'll find that creating a habit of lifelong learning is not just easy - it's one of life's greatest joys.

## **About the Author:**



Michelle LaBrosse, PMP, is an entrepreneurial powerhouse with a penchant for making success easy, fun, and fast. She is the founder of <a href="Cheetah Learning">Cheetah Learning</a>, the <a href="author">author</a> of the <a href="Cheetah Learning">Cheetah Learning</a>, the <a href="author">author</a> of the <a href="Cheetah Learning">Cheetah Learning</a>, the <a href="author">author</a> of the <a href="Cheetah Learning">Cheetah Learning</a>, the <a href="author">author</a> of the <a href="Cheetah Learning">Cheetah Learning</a>, the <a href="author">author</a> of the <a href="author">Cheetah Learning</a> of the <a href="author">Cheetah Learning</a>, and a prolific <a href="blogger">blogger</a> whose mission is to bring Project Management to the masses.

Cheetah Learning is a virtual company with 100 employees, contractors, and licensees worldwide. To date, more than 50,000 people have become "Cheetahs" using Cheetah Learning's innovative Project Management and accelerated learning techniques.

Honored by the Project Management Institute (PMI®), Cheetah Learning was named Professional Development Provider of the Year at the 2008 PMI® Global Congress. A dynamic keynote speaker and industry thought leader, Michelle is recognized by PMI as one of the 25 Most Influential Women in Project Management in the world.

Michelle's articles have appeared in more than 100 publications and websites around the world. Her monthly column, the **Know How Network**, is carried by over 400 publications.

She is a graduate of the Harvard Business School's Owner/President Management (OPM) program and holds engineering degrees from Syracuse University and the University of Dayton.