Citation:

Medina, J. (2008, 2014). Brain Rules: 12 Principles for Surviving and Thriving at Work, Home, and School. Pear Press, Seattle, WA.

Table of Contents (below)

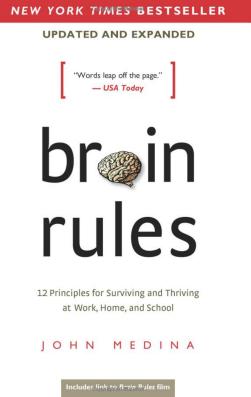
The rules have changed order since the 2008 edition. The updated and expanded version is the one you want to buy anyway....it provides even more resources and food for thought.

Abstract: (from the introduction)

"My goal is to introduce you to 12 things we know about how the brain works. I call these brain rules. For each rule, I present the science, introduce you to the researchers behind it, and then offer ideas for how the rules might apply to our daily lives, especially at work and school. The brain is complex, and I am taking only slivers of information from each subject—not comprehensive but, I hope, accessible."

"Here's a sampling of the ideas you'll encounter:

 We are not used to sitting at a desk for eight hours a day. From an evolutionary



perspective, our brains developed while we walked or ran as many as 12 miles a day. The brain still craves this experience. That's why exercise boost brain power (Brain Rule #2) in sedentary populations like our own. Exercisers outperform couch potatoes in long-term memory, reasoning, attention, and problem-solving tasks.

 As you no doubt have noticed if you've ever sat through a typical powerpoint presentation, people don't pay attention to boring things (Brain Rule #6). You've got seconds to grab someone's attention and only 10 minutes to keep it....

... and so on.

My take:

I read the 2008 version of this book and it had a significant impact on how I thought about my own teaching and presenting of information to others. I now want to buy the updated version because it has some additional insight I want to gain. I'd recommend this book to help frame how you think about the brain's needs as you teach.

Enjoy! I list the 12 rules on the next page, along with the Table of Contents and a poster that's featured in the updated edition.

Brain Rule #1: The human brain evolved too

Brain Rule #2: Exercise boosts brain power

Brain Rule #3: Sleep well, think well

Brain Rule #4: Stressed brains don't learn the same way

Brain Rule #5: Every brain is wired differently

Brain Rule #6: We don't pay attention to boring things

Brain Rule #7: Repeat to remember

Brain Rule #8: Stimulate more of the senses

Brain Rule #9: Vision trumps all other senses

Brain Rule #10: Study or listen to boost cognition

Brain Rule #11: Male and female brains are different

Brain Rule #12: We are powerful and natural explorers

Next Page: poster of 12 Rules Source: (2014 edition) Copyrighted Material

contents

i

1

17

37

57

83

103

125

181

199

223

243

267

12 Brain Rules

Introduction

Dumb things we do \sim The grump factor \sim Getting you in the loop \sim A brilliant survival strategy \sim Your amazing brain

Exercise

Our brains love motion \sim The incredible test-score booster \sim Will you age like Jim or like Frank? \sim How oxygen builds roads for the brain

Sleep

Stress

The brain doesn't sleep to rest \sim Two armies at war in your head \sim How to improve your performance 34 percent in 26 minutes \sim Which bird are you? \sim Sleep on it!

Stress is good, stress is bad \sim Villains and heroes in the toxic-stress battle \sim Why the home matters to the workplace \sim Marriage intervention for happy couples

Wiring

Neurons slide, slither, and split \sim Experience makes the difference \sim Furious brain development not once, but twice \sim The Jennifer Aniston neuron

Attention

 $\label{eq:constraint} Emotion\ matters\ \sim\ Why\ there\ is\ no\ such thing\ as\ multitasking\ \sim\ We\ pay\ great\ attention\ to\ threats,\ sex,\ and\ pattern\ matching\ \sim\ The\ brain\ needs\ a\ break!$

Memory

Memories are volatile \sim Details get splattered then pieced back together again \sim If you don't repeat this within 30 seconds, you'll forget it \sim Spaced repetition cycles are key to remembering

Sensory integration 161

Lessons from a nightclub \sim How and why all of our senses work together \sim Multisensory learning means better remembering \sim What's that smell?

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Vision

Music

Index

Playing tricks on wine tasters \sim You see what your brain wants to see, and it likes to make stuff up \sim Throw out your PowerPoint

Bringing a man back to life \sim Listening and language skills \sim Fine-tuning emotion detection and empathy \sim Music as therapy

Gender

Sexing humans ~ The difference between little girl best friends and little boy best friends ~ Men favor gist when stressed; women favor details ~ A forgetting drug

Exploration

Babies are great scientists \sim Exploration is aggressive \sim Monkey see, monkey do \sim Curiosity is everything

Acknowledgments 263

Brain Rules

survival The human brain evolved, too.

Repeat to remember.

Exercise boosts brain power.

Sleep well, think well.

Stressed brains don't learn the same way.

vision

4 sensory integration Stimulate more of the senses.

Vision trumps all other senses.

Study or listen to boost cognition.

wiring Every brain is wired differently.

Q attention We don't pay attention to boring things. Male and female brains are different.

we are powerful and natural explorers.