

THE BIOLOGY OF LEARNING

LEARNING SUPER PROTOCOL

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- **1** GET ALERT
- **2** GET FOCUSED
- **3** GENERATE REPETITIONS
- 4 EXPECT & EMBRACE ERRORS
- 5 RANDOMLY INSERT
 MICRO-REST INTERVALS
- 6 USE RANDOM INTERMITTENT REWARD
- 7 LIMIT LEARNING TRIGGER
 SESSIONS TO 90 MIN OR LESS
- 8 INCORPORATE 10-30 MIN NON-SLEEP DEEP REST (NSDR) POST-LEARNING TRIGGER SESSIONS
- 9 MAXIMIZE QUALITY & OPTIMAL DURATION OF SLEEP!







GET FOCUSED

2



GET MOTIVATED

Getting alert and getting focused combine to drive motivation.



TOOLS

Listening to white noise before learning can shift brain circuitry into alertness. Staring at a visual target for 10-60 seconds (while reducing blinks) can also bring about an elevated level of focus and alertness.





GENERATE REPETITIONS

After getting alert and focused, dedicate a portion of the lesson or practice to generating as many repetitions as possible without worrying about errors.





EXPECT & EMBRACE ERRORS

An error made during the attempt to complete a task creates heightened levels of activity in the brain's pre-frontal cortex. This increases your ability to be both alert and focused.



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RANDOMLY INSERT MICRO-REST INTERVALS

Build in 10-30 second rest intervals to increase learning. Information during these brief pauses replays at 10-20 times the speed, increasing the amount of repetitions within the same timeframe.



6

USE RANDOM INTERMITTENT REWARD

When there is an expected reward, it diminishes the capacity for focus, attention, and learning. Random rewards work, but sometimes the best reward is none at all. This keeps the dopamine system potent.



7

LIMIT LEARNING TRIGGER SESSIONS TO 90 MIN OR LESS

It is hard work to focus, and maintaining high levels of alertness can be taxing. As the brain consumes calories, the molecules of alertness can create agitation.



8

INCORPORATE 10-30 MIN NON-SLEEP DEEP REST (NSDR) POST-LEARNING TRIGGER SESSIONS

Naps, yoga-nidra, meditation, etc. help you to relax and reduce stress. Like sleep, post-training rest or meditation after learning enhances the speed and depth of learning.





MAXIMIZE QUALITY & OPTIMAL DURATION OF SLEEP

During sleep, you are rehearsing activities from the day backward and forward, and at a very high speed. What was once hard, impossible, or needed intense focus becomes reflexive.

