

Study Like a Genius: Unlocking Your Brain

Bottom Line

All learning is founded on one key—the ability to take in information and then remember it. Unfortunately, most people are never taught how to effectively learn. Each school year, students spend countless hours studying, only to have the information seemingly disappear when they need it most. Whether a parent or student, we introduced study tools such as speed reading and memory techniques to exponentially increase your learning potential. Additionally, we discussed practical ways to implement memory tools such as the “peg” system and mindmaps in academics, work, and everyday life.

Brain Facts

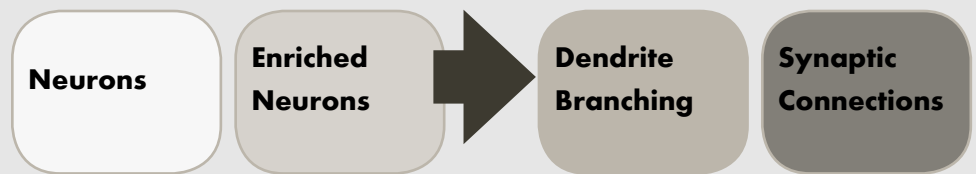
- The human brain is roughly equivalent to the size of a large grapefruit and weighs about three pounds.
The outer protective covering of the brain is called the cerebral cortex. It contains over one million miles of nerve fibers. Additionally, the brain contains over 100 billion neurons (neurons store information) that are capable of processing 10 to the 100 trillionth power bits of data per second!
- The parts of the brain (two hemispheres and four lobes)
Hemispheres: left and right sides of the brain
- These hemispheres are connected by nerve bundles that allow the two hemispheres to exchange information more freely.
Lobes and functions
- Frontal: located around your forehead. Extroverted behavior and emotion processed. It helps you with purposeful acts like judgment, creativity, problem solving, planning, and decision making.
- Parietal: located in the top back area of the brain. Duties include processing higher sensory and language functions, hand-eye coordination, and skilled motor movements.
- Occipital: located in the middle back of the brain. It's primarily responsible for visual recognition.

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- Temporal: located above and around the ears, thus functions within the realm of hearing, balance, muscle coordination, smell, and language.

Other Parts of the brain: The hippocampus, thalamus, hypothalamus, and amygdale. This mid-brain region is responsible for emotions, hormones and producing brain and body chemicals (among other things).

The Cerebrum, Latin for "little brain" is located in the back middle area of the brain. It helps you with balance, posture, and motor movement, among other things.



Retrieve it when you need it...Dendrite Branching and Synaptic Connections!

The Big Picture:

- "45% of students show no significant improvement in the key measures of critical thinking, complex reasoning and writing by the end of their sophomore year (after two years of college)." Academically Adrift by Richard Arum
- Einstein was reported to only be tapping into 1/10 of 1% of his brain's capacity!

People are reading too slowly and the brain diverts brain focus due to being bored.

Stimulating the Brain

- Sleep—Essential for life, health, peak brain function
Just as a computer needs an occasional “defragmentation,” we require sleep to allow time for our brain to organize and store information.
- Cardiovascular Exercise
20–30 minutes/day
Brain uses one fifth of the body’s oxygen.
- Proper nutrition
Composition: 78% water, 10% Fat, 8% Protein, 4% Other (not rocks)
8–12 8 ounce glasses of water
Nuts high in protein (almonds)
Caffeine and energy drinks will do more harm than help when it comes to studying. If you are going to pollute your body with toxins... dilute with water!

1. Speed Reading

The faster you read...the higher your comprehension rate. Speed reading takes you to the next level in reading vs. phonetic reading.

- Comprehension Speed: 9000 WPM
- Avg. Reading Speed: 300 WPM
People are reading too slowly and the brain diverts brain focus due to being bored.

Speed Reading Tips and Techniques

- Concentration
- Correct your study posture, check lighting and create distraction-free surroundings
Master the “triple speed drill” and technique (do drill 4 times)

Speed
reading drills
help train
your eyes
to keep up
with the full
potential of
your brain.

Just as a musician uses drills to increase muscle memory and performance dexterity, the speed reading drills help train your eyes to keep up with the full potential of your brain. "Practice makes perfect" and is well worth the effort required to overcome bad habits!

- Begin reading at normal comprehension rate (1 minute)
- Then pick up the speed 2x (1 minute)
- Then pick up the speed even more 3x (1 minute)
- Return to comprehension rate (1 minute)
- Use the guiding finger motion
- Hand-over-page method helps set a consistent speed and will also block out information so that your eyes do not continue subconsciously scanning the pages.

Schema

- The mind's ability to take in new information and attach it to information that you already know. Could also be called "increasing your synaptic connections."
- Use the multiple reading speeds (below) as you study so that you can build your schema and context for information.

Multiple reading speeds

- Skimming: Page per second.
- Reading: Comprehension rate.
- Identify specific areas that you need to come back to and study.
- Studying: Thorough investigation of difficult parts.
- Identify the appropriate memory technique to use.
- Reviewing: Quick skim

The Smart Way to Read a Textbook

- Scan Table of Contents, entire text, and glossary which alerts your "reticular activating" system
- Scan chapter and summary questions
- Read at comprehension rate
- Study-taking notes, etc.
- Scan chapter to review

Associations
help you
make logical
connections.

2. **Dynamic Memory**

- Memory Techniques
Learning Pathways
- Auditory: Verbal instructions, debates, lectures, reading aloud, oral summaries
- Visual: Pictures, diagrams, charts, mental pictures
- Kinesthetic: Moving, touching, hands-on, writing
- Use F.P.G. to Study
Use as the foundation to attach and learn non-logical information
 - File—A place to put the information.
 - Picture—Something you visualize
 - Glue—What holds it together
Vivid Visualization
Imagination
Active Action
- Associations help you make logical connections with Peg Lists
Number rhyming list:
 - One-Bun
 - Two-Shoe
 - Three-Tree
 - Four-Door
 - Five-Hive
 - Six-Sticks
 - Seven-Heaven
 - Eight-Gate
 - Nine-Vine
 - Ten-Hen

House list

Car list

Body list

Any list of things in your long-term memory

Mind maps...
make use of
all learning
pathways.

- Mind Maps
Global vs. linear presentation of facts
Integrates left and right brain functions
Makes use of all learning pathways

Use Mindmaps for:

- A single topic
- Chapters of a book
- A whole book
- An entire course
- An entire semester of courses

For More Information

- Maximum Speed Reading, Howard Berg (World's Fastest Reader)
- Dynamic Memory and Study Skills, Brad Voeller
- Free mindmap download: www.CollegePlus.org/Mindmap
- The Brain Matters, Patricia Wolfe
- Teaching with the Brain in Mind, Eric Jensen
- Understand Your "Brain Type" With Jon Niednagel, <http://braintypes.com/what-is-brain-typing/>