Brian Johnson's PhilosophersNotes
More Wisdom in Less Time

THE BIG IDEAS

Pseudo-Work
vs. Real work.

Procrastination
Declare war on it. 5 battle strategies.

The Study Questions
When? Where? How long?

#1 Way to Learn
Quiz-and-recall vs. fluency illusion.

S.P.A.C.E. O.U.T.
Your studying.

Create Autonomy
Via excellent grades.

"There are many, many different ways to study (and rote review is not one of the better ones). Once you reject the idea that all studying is equal, and instead make the crucial connection that studying is like any other skill-and as with any skill, can be done well or done poorly-then the premise of this book starts to make sense."

~ Cal Newport

How to Become a Straight-A Student

The Unconventional Strategies Real College Students Use to Score High While Studying Less

BY CAL NEWPORT · THREE RIVERS PRESS © 2006 · 224 PAGES

"While most college students toil arduously through the study and paper-writing processes, there exists an elite group of undergrads who have discovered unconventional strategies for earning much higher grades in much less time. I wanted to share these secrets with other students, and thus the idea for this book was born. ...

In the pages that follow, you will discover the details of these often surprising study strategies. I've included examples and case studies throughout the book to demonstrate how to apply the advice in many different real-life academic situations. You will learn how to:

- Manage your time and deal with the urge to procrastinate.
- Take targeted notes in class.
- Handle reading assignments and problem sets with ease.
- Prepare efficiently for exams.
- Master the art of exam-taking.
- Write incisive critical analysis essays.
- Write standout term papers."

~ Cal Newport from *How to Become a Straight-A Student*

I read this book as part of my prep for Learning 101.

I love Cal and his work. Check out our Notes on a couple other great books he's written: *So Good They Can't Ignore You* and *Deep Work*.

This one is a great complement to a few other great books on learning: *Make It Stick*, *How We Learn* and *A Mind for Numbers* (of course, check out those Notes).

While those books provide some great perspectives on the learning process from leading cognitive scientists, a journalist, and a math teacher, respectively, this one is all about how top performing college students master the learning (and testing/writing!) process of college.

Cal shares the top ideas he gleaned from interviews with non-grind Phi Beta Kappa members at elite schools across the country. They had to perform well AND they had to achieve those results without grinding away. Their practices, although discovered independently, reflect the same wisdom shared in the science books. It's great to see the overlap.

Although I graduated Phi Beta Kappa from UCLA without grinding, I absolutely wish I had read this book while still in college. If you're in college/heading to college/have a kid en route/etc., I HIGHLY recommend you check this out. (Get the book here.)

With that, I'm excited to share some of my favorite Ideas so let's jump straight in!

PSEUDO-WORK VS. REAL WORK (SECRET FORMULA)

" Remember: ' Work hard, play hard ` is always better than ' work kind of hard, play kind of hard. `"

~ Cal Newport

"In fact, when asked what one skill was most important in becoming a non-grind straight-A student, most of them cited the ability to get work done quickly and with a minimum of wasted effort.

So how do these students achieve this goal? A big part of the solution is timing—they gain efficiency by compressing work into focused bursts. To understand the power of this approach, consider the following simple formula:

work accomplished = time spent x intensity of focus

Pseudo-work features a very low intensity of focus. Therefore, to accomplish something by pseudo-working, you need to spend a lot of time. The straight-A approach, on the other hand, maximizes intensity in order to minimize time. For example, let's rank intensity on a scale of 1 to 10 (with 10 being the most intense). Assume it takes ten hours to finish studying for a test by pseudo-working with a low intensity score of 3. According to our formula, this same amount of work can be accomplished with only three one-hour bursts, each with an intensity of 10. The work that took you all day Sunday to complete could instead be finished by studying an hour after breakfast, an hour after lunch, and an hour after dinner—the rest of the day being free for you to relax."

Pseudo work vs. real work.

The non-grinding straight-A students got REALLY good at *actually* working when they were working. The grind students have to put in WAY more time to get the same amount of work done because they weren't *really* working.

So... Want to minimize time studying (or working in general)?

MAXIMIZE the intensity with which you work.

Cal wrote this book 10 years before writing *Deep Work*—which is essentially a treatise on how important it is to do real, deep work that matters. Don't do pseudo or shallow work. Get intense. Go deep.

He tells us: *"Deep work is so important that we might consider it, to use the phrasing of business writer Eric Barker, 'the superpower of the 21st century.'"*

It's fun to see that Cal shares the same basic formula in *Deep Work* (good things persist!):

> *"High-Quality Work Produced = (Time Spent) x (Intensity of Focus)"*

Check out our Notes on *Deep Work*. (And get the book. One of my top recs for 2015!)

For now, check in on your intensity levels when you're working. Where're you at? You SUPER intensely focused with ZERO distractions? (Smartphone in airplane, internet off, etc.?)

And remember: You think you're at an 8 but you're really at a 2. :)

How can you dial in your intensity more today?

P.S. Another key theme of both books is the fact that deep, focused work is draining so you need to SPACE it out—which just so happens to be one of the keys to the science of effective learning. (More on that in a moment...)

P.P.S. All of that is from Chapter 1: "Manage Your Time in Five Minutes a Day." We need to SCHEDULE our deep, focused work blocks and, ideally, routinize them.

AND... Cal tells us that the best time to get this intense work in is as early in the day as possible—your mind is fresh, you can crush it. If you wait to the end of the day, you're less fresh and unanticipated things can come up to distract you. (More on that in a moment as well.)

" Learning a large quantity of material from scratch during the review process is a mistake made by average students-and you should avoid this."

~ Cal Newport

DECLARE WAR ON PROCRASTINATION

"Over time, these extended responses began to paint a clear picture. When the straight-A students answered 'I don't defeat procrastination,' they really meant to say, 'I don't defeat the *urge* to procrastinate.' And this makes perfect sense. To put it simply, some work just plain sucks, and you, like the straight-A students interviewed for this book, will want to procrastinate on this sucky work. It's unavoidable. Therefore, the goal in this step is not to teach you how to love all the work and never feel like procrastinating ever again. Instead, I'm going to describe some targeted strategies to help you *sidestep* this unavoidable urge when it arises—not destroy it altogether. This is how straight-A students prevent procrastination from destabilizing their schedule. They don't rely only on willpower and good intentions, but instead deploy an arsenal of specific, tested rules that help them short-circuit their natural desire to procrastinate. These students, of course, aren't perfect, and they still occasionally put off work for no good reason. But overall their strategies made them significantly more effective at following a study plan than their peers—and this made all the difference."

That's from Chapter 2: "Declare War on Procrastination" in which Cal shares five strategies to win the procrastination battle.

First, though, we need to recognize that we will NEVER completely conquer the *urge* to procrastinate. We just need to get better at not allowing that urge to dictate what we actually do.

Remember *The Happiness Trap* and ACT—it's a trap to think we'll get rid of the urge to procrastinate (or that something's wrong with us if we don't). The trick is to allow the thoughts and feelings to be present (via defusion and expansion) AND then do what needs to get done. Easier said than done, of course, but super important to master.

So, our five strategies. Briefly:

1. ***Keep a work progress journal.*** Basic idea: Get a super simple spiral notebook. Each morning, take a minute to jot down what you plan to get done. If you rock those things, you just write down: "All completed." If you DON'T do what you said you'd do, you need to write down why. Cal's point with this is: No one likes to write down why they flaked. That level of accountability boosts performance immediately.
2. ***Feed the Machine.*** Essence of this idea: Low energy fuels procrastination. <— Research concurs that the fastest way to kill your willpower is to be either tired or hungry (combine the two and you're in even more trouble!). So, get rested, and be well fed. And, Cal advises to drink tons of water, don't overdo the caffeine, don't skip meals, and use your food as a source of energy rather than satisfaction (hint: no refined carbs/sugar if you want sustained energy).
3. ***Make an event out of the worst tasks.*** When you have inevitably super uninteresting stuff that just has to get done, make an event out of it by going to some distant coffee shop or other location without any of your normal distractions. And just get it done.
4. ***Build a routine.*** Find a way to make your deep, intense work more consistent so you can install the habit and let it run on autopilot rather than having to use your willpower each step of the way. Remember Habits 101 + Willpower 101!
5. ***Choose your hard days.*** Some days you're just going to get slammed with work. But, try to see these in the future and schedule them. Then always bake in a recovery day after—don't have two hard days in a row. (I actually used a modified version of this with my class scheduling at UCLA—I'd make sure I never had two finals on the same day. Laughing but I was a bit of last-minute get-it-done crammer in those days and found that spacing *very* helpful. :)

Check out Conquering Procrastination 101 for a bunch of other Big Ideas.

For now, one more bit of wisdom from Barbara Oakley—who dedicates a considerable amount of time discussing how to defeat procrastination in *A Mind for Numbers*. She tells us that the pain is in the ANTICIPATION of having to do the work. Once we sit down to do it, it's not a big deal.

fMRI studies reveal this: *"**We procrastinate about things that make us feel uncomfortable.** Medical imaging studies have shown that mathphobes, for example, appear to avoid math because even just thinking about it seems to hurt. The pain centers of their brains light up when they contemplate working on math.*

But there's something important to note. It was the anticipation that was painful. When the mathphobes actually did math, the pain disappeared. Procrastination expert Rita Emmett explains: 'The dread of doing a task uses up more time and energy than doing the task itself.'

*Avoiding something painful seems sensible. But sadly, the long-term effects of habitual avoidance can be nasty… **Procrastination is a single, monumentally important 'keystone' bad habit.** A habit, in other words, that influences many important areas of your life. Change it, and a myriad of other positive changes will gradually begin to unfold."*

WHEN? WHERE? HOW LONG?

"The little things count. This is especially true when it comes to studying. Before we get caught up in the details of exactly how to review and synthesize material, there are some basic questions that we must address first: *When* during the day should you study? *Where* should you go to study? *How long* should you study before taking a break? The right answers will boost your productivity, allowing you to squeeze more work out of even less time. The wrong answers will slow you down and make this process more difficult than it needs to be. Straight-A students, I found out, devote a lot of thought to these questions; they recognize how these seemingly little details can make or break their study efforts and have experimented extensively to discover the most effective strategies."

That's from Chapter 3: "Choose When, Where, and How Long."

Let's quickly look at each:

QUESTION: When is the best time to study?
ANSWER: *Early*.

Cal tells us that we're most effective between the time we wake up and dinner. Therefore, get your work done as early in the day as you can. Energy is fresh and unexpected things are better managed = winning combo. Get your work done during the day so you can enjoy a great night.

QUESTION: Where should you study?
ANSWER: *In isolation*.

The #1 way to get yourself into pseudo-work-ville is to work in your dorm or cafeteria or some place where a ton of people can distract you. Remember our intensity equation above? BE FOCUSED. Find a quiet place somewhere and crush it. In isolation.

QUESTION: How long should you study?
ANSWER: *No more than one hour at a time without a break*.

Intense, focused work is draining. We need to honor our ultradian rhythms and take a break AT LEAST every hour. Just 5 to 10 minutes off allows our brains to recharge and hit it hard again. *"Even if you feel like you are on a roll, keep taking regular breaks. Over the long run, it will maximize your energy and retention of the material."*

Early. In isolation. Lots of little breaks.

THE #1 WAY TO MASTER/LEARN SOMETHING (+ #1 THREAT)

" Embrace the quiz-and-recall method. It's the single most efficient way to study."

~ Cal Newport

"Whether it's philosophy or calculus, the most effective way to imprint a concept is to first review it and then try to explain it, unaided, in your own words. If you can close your eyes and articulate an argument from scratch, or stare at a blank piece of paper and reproduce a solution without a mistake, then you have fully imprinted that concept. It's not going anywhere.

The same is *not* true if you merely read over something. Passively reviewing a concept is not the same as actively producing it. Most students make the mistake of relying only on passive review; they read and reread their notes and assignments, and assume that the more they read, the more they will remember. But as Ryan from Dartmouth warns: 'Simply reading it over doesn't work. You have to make the extra effort to get it into your head.'"

The #1 threat to truly learning something (so you can perform well on exams)?

The Fluency Illusion.

Simply stated, it's the sense that, just because something *feels* familiar to you while you re-read your notes/review your highlights, you *actually* understand it.

This is THE #1 mistake most students make—re-reading their notes and thinking they're good. That "fluency" is an ILLUSION. You *must* ELIMINATE IT.

The best way to test whether you actually know something? TEST YOURSELF. Literally. Shut the book and see if you can describe a key Idea to yourself. (Or someone else.) Pull out a blank piece of paper and solve a challenging problem.

If you can do THAT, you've mastered it. If not, you haven't. Period.

S.P.A.C.E. O.U.T. YOUR STUDYING

"If you have material that must be truly memorized—dates, chronologies, formulas—there are, unfortunately, no real shortcuts. You just have to keep working with your flash cards until you have no trouble providing the right answer, even after you shuffle the cards into a random order.

Memorization is particularly dependent on your available mental energy. It doesn't work if you try to commit items to memory for eight hours straight, but it does work if you memorize only an hour at a time and only one or two hours a day. So separate the task of memorizing from your other review. Spread the work out over many days, and never dedicate too much time to any one sitting with your flash cards. Melanie from Dartmouth recalls how some of their peers would 'review their flash cards at any opportunity—eating dinner, waiting in line at an e-mail terminal,' which is the most effective way to commit the necessary items to memory."

This is a REALLY good example of one of the most powerful scientifically-proven learning techniques called "distributed learning" or the "spacing effect."

Basic idea: Your brain does WAY BETTER learning information when it's *spaced* out rather than all crammed in. In *How We Learn*, Benedict Carey likens it to watering his lawn in LA. Three, 30-minute waterings per week were WAY more effective than one, 90-minute watering.

" Smart students avoid these issues by working constantly on assignments, in small chunks, every day."

~ Cal Newport

Same thing with your memorization (and studying in general).

S.P.A.C.E. O.U.T. your studying.

But only if you want to make it stick. :)

P.S. The same general principles work with writing a paper: Give yourself more time to do it and you engage your subconscious mind to help you throughout the process. Remember: Your conscious mind is, according to Heidi Grant Halvorson, kinda like a post-it note relative to the NASA-supercomputer-like subconscious mind. <— Put it to work!

"You've learned two crucial insights: (1) Brute force study habits are incredibly inefficient; and (2) It is possible to come up with techniques that work much better and require much less time. ... You are now prepared ... to begin scoring top grades without sacrificing your health, happiness, or social life."

~ Cal Newport

CREATING AUTONOMY TO PURSUE MEANINGFUL OPPORTUNITIES

"As our generation finds itself increasingly stressed and disillusioned with life paths that we feel have been imposed upon us from the outside, this lesson takes on a particular importance. By mastering the skills in this book you are, in effect, taking control of your own young life. You are declaring to the world that you're not at college just because it seemed like the thing to do; instead, you're there to master new areas of knowledge, expand your mental abilities, and have some fun in the process. You're also denying your major or the climate of the job market the right to dictate what you can or can't do after graduation. By scoring exceptional grades, you are opening the door to many interesting and competitive opportunities that allow you, and not anyone else, to make the decision of what post-college pursuits will bring you the most fulfillment. In the end, therefore, this book is about so much more than just grades; it is about taking responsibility for your own journey through life. I wish you the best of luck in this adventure, and hope this advice helps you to launch an exciting future."

Those are the final words of the book.

The good grades are a vehicle not a destination—a launching pad + fuel to create and pursue meaningful opportunities.

In *So Good They Can't Ignore You*, Cal talks about creating "career capital" by being REALLY good at what you do. You use that capital to "buy" better and better opportunities.

Same basic idea here. Our mastery of the academic side of things at that phase of our lives gives us the autonomy to script our futures.

Let's do that as we optimize and actualize and give our gifts to the world!

Brian Johnson,
Heroic Philosopher CEO

If you liked this Note, you'll probably like…

- Deep Work
- So Good They Can't Ignore You
- A Mind for Numbers
- Make It Stick
- How We Learn

About the Author of This Note

BRIAN JOHNSON

Brian Johnson is the Founder + CEO of Heroic. He's spent half of the last 25 years as a Founder/CEO and the other half as a Philosopher. Brian loves integrating ancient wisdom and modern science to help YOU become the best, most heroic version of yourself so we can create a world in which 51% of humanity is flourishing by 2051. Learn more at heroic.us.