

(while studying less)









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# **STEP 2 - TAKE MORE EFFECTIVE NOTES**

Your notes are your method of taking the information that you're exposed to and recording it in a form that makes sense to you. When you do this, you learn more effectively. Also, you keep margins nearby for spontaneous drawings of those weird "S" things - or elaborately drawn out Mario levels if you're me.

In this step, I'll teach you what I know about taking **better** notes - notes that focus on *learning* rather than simply recording, that cut down on the processing you have to do after class, and that enable you to study more efficiently.

## **Five Excellent Note-Taking Methods**

There are many ways of taking notes, one of which is dipping your entire head in ink and slamming it on your notebook, then making mental associations between what you're learning in class and specific features of the resulting picture, which probably looks like a rejected Rorschach test card at this point.

Unfortunately, the subsequent amnesia makes this a less-than-stellar method. I know you're dying to test it for yourself, but trust me - use one of these five systems instead.

*Note:* Ebooks aren't a good format for images, but you can find visual examples of all of these in <u>my video on note-taking systems</u>.

### The Outline Method

Aside from just mindlessly writing your notes out in paragraph form, the Outline Method is probably the simplest note-taking method that you could use. To use it, you just create bullet lists out of the lecture material or book you're reading.

- Main ideas are at the top level
  - Supporting details become nested
  - Eventually you build an organized, hierarchical outline of the material
- This is pretty meta

I have a habit of reading a book for at least 15 minutes a day, and whenever I finish a chapter, I immediately go over to Evernote and type out some notes on

what I read. When I do this the Outline Method is my system of choice.

While some of the other methods I'll be going over offer certain benefits for learning, I find that this method is perfect for recording a concise picture of the entire book without losing any important details. Also, if you prefer to take your notes on a computer, the Outline Method is one of the easiest to use.

The only problem with the Outline Method lies in how easily it lends itself to **mindless note-taking** - that is, simply recording the lecture material without really thinking about it or trying to put it in your own words. I've definitely been guilty in the past of sitting in certain classes and trying to note down every detail the professor says without really putting in the mental effort to learn.

#### The Cornell Method

I'd be surprised if you've never heard of this system before, though you may not know exactly how to use it. The Cornell Method was invented by Walter Pauk - the man who wrote the excellent textbook *How to Study in College* - and is designed to cut down on the amount of time you need to spend processing your notes after class before you can properly study them.

To take notes in the Cornell style, you divide your paper into three sections:

- 1. The Cue column
- 2. The Note-taking column
- 3. The Summary column

The Note-taking column will be the most familiar to you, as it just contains the notes you take during class. You can use any style you want, though in most cases people will use the Outline Method.

As you take your notes, you'll use the Cue column to formulate questions based on main ideas and important details from the Note-taking column. Once class is over, you should immediately write a small summary of what was presented in the Summary column.

By doing this, you're processing your notes for efficient study *while you're still in class*. When it comes time to actually study them, you'll find that you're already halfway to creating a great study guide, as you've already written down questions. You should also have a clearer understanding of the material already, since you took the time to summarize it.

## The Mind Map Method

Mind mapping is a fantastic method for creating a tree of connected ideas, and I find that creating mind maps helps me to better flesh out ideas I want to write

about. They're a great way to visualize a lot of information.

To create a mind map, start with a single "umbrella" term in the middle of your page. Then, start branching out from it by drawing lines and writing down words that flesh out that main idea.

Mind maps are very visual, so you should experiment with using different colors, drawing pictures next to your terms, and doing other things that help you understand and remember the information more clearly.

You don't have to use paper for your mind maps, either. While I prefer doing it that way, there are plenty of apps that let you make mind maps on your computer; my favorite is <u>Coggle</u>, which is a free web app that has a lot of convenient keyboard shortcuts for creating your maps.

For me, mind maps are best used when I'm trying to get a clear picture of all the details underneath a certain topic. I'm not so fond of using them when taking notes during classes, since I often like to create diagrams, write down more detailed blocks that don't always fit nicely into map nodes, etc.

But what if you want to integrate small mind maps into your notes? Can you create a hybrid system? Yes you can, and it's...

#### The Flow Method

Your brain stores information in a messy web of tangled facts, ideas, memories, and references. The structured hierarchy of Outline-style or Mind Mapped notes doesn't exactly represent how that content lives in your head.

Enter the Flow Method of taking notes. This method was created by Scott Young, a writer who is best known for going through a self-directed version of MIT's entire computer science curriculum in just one year. Scott takes in information using a technique he called **holistic learning**. This technique emphasizes learning in a style that mirrors your brain - creating interconnected webs of information (or "constructs"), visualizing things, and avoiding rote memorization.

The Flow Method is one of the cornerstones of holistic learning. Most other note-taking systems are based on hierarchy - as I illustrated in the section on the Outline Method, you put main terms at the top and nest related details directly under them. Mind maps are similar; the main term goes in the middle, and details branch out from there.

Conversely, Flow notes are meant to be an on-paper representation of your **mental picture** of a subject. When you take notes in this way, you're transcribing them in a completely original way instead of simply copying down

what's presented in lecture. It's *very* difficult to become a mindless copying zombie when you're taking Flow notes, which is something that can't be said for the Outline Method.

"Flow-based notetaking is a creative process, not a recording process. Instead of just writing down what the professor argues, you're also going to come up with your own ideas, examples, and connections." - Scott Young

The main goal of Flow-based note-taking is to help you **learn the material once**. By taking notes in this way, you should be able to actually integrate new facts into your existing body of knowledge the first time you process them, rather than having to go back later to study them a second time.

So, how do you actually take Flow-based notes? Here are the basics:

- Connect terms and ideas with arrows
- Deliberately write things down in your own words
- Create *backlinks* links ideas back to related terms and details mentioned earlier in the lecture

This style of note-taking is probably the hardest to perfect, as it's very personal and requires you to think about your notes in a very different way than you're probably used to. If it's a style you want to pick up, give it a good few tries before writing it off.

Also, recognize that Flow-based note-taking isn't perfect for every subject; as Scott Young emphasizes, it's best for subjects where the ideas are easily connected to other ideas. For very detail-dense classes where the material doesn't easily form a dense web of connections, a more hierarchical system will probably help you capture all the information you'll need to study more effectively.

### The "Write on the Slides" Method

If your professor is nice enough to provide the lecture slides to you before they're actually shown in class, then printing them out and taking notes right on them can be an excellent method of note-taking.

I call this the "lazy man's approach to note-taking," but in reality it's just efficient; if 80% of the information is already available for you to take home,

then you can save a lot of time by simply adding personal notes and references on top of it instead of going through the effort of writing your notes from scratch.

One nice feature of this "system" is that it gives you something similar to a **timeline** of the lecture. Since the slides are usually presented in a linear fashion, you can use your slide-notes as a way to jog your memory about things that were said at a specific point in a past lecture. It's quite similar to SoundCloud, which is a hosting service for audio files that lets you leave comments at specific points on a track.

There isn't much more to say about this method; however, I will mention that it's important to remain vigilant about truly learning the material and putting ideas in your own terms. The few times I've used the method in my classes, I found I was much lazier about creating a thorough picture of the material.

## Paper Notebooks vs. Laptops

Besides your note-taking system itself, another choice you have to make when taking notes is whether to use plain old paper or a computer. Each method has its benefits and drawbacks.

Taking notes on your computer will typically be much faster than writing them out by hand, and you won't have to deal with hand cramps. Paper, however, is much better for drawing diagrams and pictures - and for math notes, it's the clear winner.

However, what I want to really focus on in this section is the question of which method is better for **learning**. I came across some interesting research a while back that was published in a journal called *Psychological Science*. Here's the relevant bit:

"In the research trial, students who took their notes longhand wrote on average of 173 words compared to computer note takers who wrote 310. Students who typed their notes were also more likely to take down notes word-for-word."

A lot of students think that they're better off if they record every word that's said in the lecture, and at first this seems logical - if you write down everything, that means you captured it all right?

In reality, though, students who do this actually learn less - and here's why.

When you're taking notes and a new idea is presented in class, it has to pass through your ears or eyes, and then go through your brain for processing before it ends up in your notes.

When that idea hits your brain, that grey goo up in your skull pays attention to two things:

- 1. **Syntax** the auditory sounds or printed letters/symbols that make up the message
- 2. **Meaning** the actual "meat" of the idea, and how it connects to other ideas

Say, for example, that your professor puts up on the board the sentence, "Megatron is a Deception." She tells you this because she is awesome and for some reason you're taking an entire class on Transformers.

When each of these words enters your brain, it'll process the symbols that make them up, recognize that they represent certain concepts, and given enough time, connect those concepts to one another as the sentence suggests. Since your brain is a giant, interconnected web of ideas, it'll also connect these concepts to other nodes in the web that were already there.

It'll connect Megatron to the Transformer node, which itself is connected to nodes like "robot", "TV show", and "Shia Labeouf is a terrible actor." (Ok, he wasn't too bad in *Eagle Eye...*)

Deception will be connected to the Transformer node as well, but your brain will also connect it to nodes like "group," which itself may be connected to nodes like "reductionism" and "Power Rangers".

Here's the thing: All of this happens when your brain processes the **meaning**. At the same time, part of your brain power is processing the **syntax** of the message so it can direct your hands to write or type it in your notes.

If you devote too much brainpower to processing syntax - that is, if you're trying to record everything in the lecture word-for-word - then there's no brainpower left over for processing meaning. You don't make any of those connections. At this point, you have basically become an unpaid court stenographer.

Going back to the research I cited, the students who typed their notes were much more susceptible to falling into the pattern of copying down lecture material word for word - hence their negatively impacted learning ability.

The lesson here is to be **deliberate** about learning - *especially* if you choose to take your notes on a computer. Since you can type much faster than you write, you have to exercise more vigilance and focus harder on actually learning the

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material - and leaving out extraneous details that only waste your time.