How to Take Smart Notes

What’s in it for me? Discover a note-taking technique that could revolutionize the way you think, write, and learn.

A blank page. It’s a familiar and terrifying sight for anyone who has to write. Maybe you’re working on an essay, or embarking on your thesis, or writing your first nonfiction book. It’s a thrilling task – but also daunting. Where to begin? What to say? And even if you do make a solid start, how do you develop your argument into a compelling whole? These are tough questions. And though there’s no simple answer to any of them, there is a method that can help you arrive at an answer. You guessed it: smart notes. In these blinks, you’ll learn

what a Zettelkasten is, and how to use one; the three types of notes you should be making; and why you shouldn’t trust your brain.

Smart notes can lead to great achievements.

Let’s get things started with a remarkable tale: the unlikely story of Niklas Luhmann. Luhmann was a German man who, in the 1960s, worked in an administration office. His leisure-time passion was reading. As he read, he made notes on things that interested him – philosophy, organizational theory, sociology. He made these notes on small pieces of paper, which he then systematically numbered before filing them in a Zettelkasten, or slip-box. Eventually, he put some of his thoughts into a paper and presented it to an influential German sociologist. Impressed, the sociologist invited Luhmann to become a professor of sociology at the University of Bielefeld. The key message here is: Smart notes can lead to great achievements. Now, Luhmann had neither a doctorate nor a sociology degree. But instead of declining the invitation, he got to work. He took sociology classes and put his thesis together in less than a year. In 1968, he became a sociology professor at Bielefeld – a position he held until his death. So how on earth did he pull this off? We’ll get to that in a minute – but, before we do, we should mention Luhmann’s other accomplishments, which are even more impressive. On taking up his position, he was asked to present what his research project would be. His reply: “My project: theory of society. Duration: 30 years. Costs: zero.” In 1997, 29 and a half years later, he completed the final two-volume chapter of his seminal work, The Society of Society. It changed the field of sociology. By the time he’d completed his magnum opus, he’d published nearly 60 books and hundreds of articles. Still more material was published after his death. Many people regarded Luhmann as a genius. But studies of his methods show that his success wasn’t the result of an inordinately vast intelligence. It was the result of smart working. Luhmann knew exactly how to use his notes, which allowed him to remain focused and in control. So why isn’t everyone doing the same? Well, first, there’s been some confusion about his process; people have tried to employ it without fully understanding its workflow. Second, most of the information about this process was in German. And, finally, the idea underpinning the process is simple – and people often don’t expect impressive results from simple ideas. What exactly was

Luhmann's process? Well, as he himself said: "I, of course, do not think everything by myself. It happens mainly within the slip-box." What's a slip-box, and how does it work? We'll explore that in the next blink.

Systematically make three types of notes to develop your ideas and arguments.

Now that you know about Luhmann and his prolific writing, it's time to find out about his Zettelkasten – the slip-box – and how he took notes. Luhmann had two slip-boxes. One was for collecting references and his notes on the contents of books. The other, his main slip-box, was for storing notes and ideas. His slip-boxes were made of wood, and he wrote his notes on index cards. You can emulate this analog system, or you can use programs that provide the same functionality with the benefit of portability. So that's the process. But what about the precise workflow? What kind of notes should you be making, and how should you store them? The key message here is: Systematically make three types of notes to develop your ideas and arguments. The first kind of notes you should take are fleeting notes. Fleeting notes don't go in a slip-box; they're simply for capturing ideas and thoughts. You can take them in a notebook, on a scrap of paper, or wherever works for you. Keep these notes in one place so you can go through them later. Then, there are literature notes – notes about what you read. While you're reading, write down things you don't want to forget along with reference details. Your notes should be short and in your own words. These go into your reference slip-box – the first of the two slip-boxes. And then there are permanent notes. These will arise from your fleeting and literature notes, which you should go through regularly – preferably daily. As you review your notes, ask yourself what's relevant to your own ideas, your research, and your interests. Remember that you're not just collecting information; you're seeking to develop your ideas and arguments. Ask how the information you're recording adds to your existing notes. Does it contradict, correct, or support them? Do new ideas come to mind? Do any new questions arise? Write one permanent note for each idea using full sentences in your own words. The aim is not to copy; it's to create something new. Be as precise and concise as you can, and don't forget to include your sources. You can throw away your fleeting notes after you've made permanent ones. And here comes the slightly more complex part. File your new permanent notes in your slip-box behind one or more existing notes. With a paper system, you can choose which note it should go behind, and then add manual references or links to related notes. A digital system allows even greater flexibility. The final element in the system is your index – keywords with a link to an entry point to particular subjects in your slip-box. Luhmann usually linked only one, or sometimes two, permanent notes.

With a slip-box, you'll never have to face a truly blank page.

It's all so simple, right? Well, not quite. Luhmann didn't file his notes by subject. Rather, he used an abstract numbering system. Each note had a unique identifier made up of numbers and letters. When he was adding a new note behind another, let's say a note

numbered 223, he'd number the new one 224. If 224 already existed, then the new one would instead be numbered 223a, and so on. If necessary, he alternated between numbers and letters, branching out as his thoughts required. If you use a digital program for your slip-box, of course, this time-consuming numbering process is more or less done automatically. Luhmann then went through his slip-box and checked for other relevant notes to make further connections. The key message here is: With a slip-box, you'll never have to face a truly blank page. How does this help you, exactly? Well, let's say you need to write a paper. Thanks to your notes, you don't have to start with a blank sheet of paper. Your slip-box provides you with a ready-made argument, along with quotes, references, and great ideas. All you need to do is present this argument. A little rewording here, a little editing there, and you'll be ready to submit it. Getting to this point takes time, though. You'll need to have built up your notes while you're reading, thinking, and generating ideas and arguments. Externalizing your ideas by writing also helps you understand and remember what you've been reading. So, if you've been populating your slip-box as we described in the previous blink, you can use the information you already have to develop your research. Ask yourself what's missing, and then read more to fill in any gaps. Clusters of ideas and thoughts in your slip-box may help you decide what to write about. Then, collect all your relevant notes and connections, and copy them to your desktop. If you're using a paper-based system, remove the notes from your slip-box. You can then use all this information to create your first draft, ordering the information as necessary. It's important at this stage to contextualize your notes and make them coherent. Ask yourself if there are any holes in your arguments. If there are, then you need to either fill them or change tack. Finally, you can edit and proofread your paper. After that, you're ready for the next one!

An elephant can only be eaten in bite-sized chunks.

Anthony Trollope, the nineteenth-century author, was both popular and productive. According to his autobiography, he wrote at least 250 words every 15 minutes from 5:30 a.m. until 8:30 a.m. This enabled him to complete 49 novels over 35 years. An enviable feat. The thought of completing a dissertation or similarly long academic text can be quite daunting. Yet a regime of writing a page a day, with one day off each week seems manageable – and it's a much less ambitious pace than Trollope's. At that rate, a doctoral thesis would actually be completed within a year. Now, in reality, that rarely happens. Sadly enough, over half of doctoral theses remain unfinished. Nonfiction and academic papers, of course, aren't written in the same way that Trollope wrote his novels – there's reading, research, and thinking to be done in addition to the writing itself. So perhaps measuring your progress on a page-per-day basis isn't appropriate to the task. Perhaps a better metric is notes per day. The key message here is: An elephant can only be eaten in bite-sized chunks. From the time he started using his slip-box until the day he died, Luhmann added around 90,000 notes to it – that's an average of six notes per day. If that still seems like too many to you, why not try just three? Even at that reduced rate, you'd still have a considerable number of notes and ideas in a short space of time. Think of it as an investment – the more notes you have, the greater the number of connections and ideas. Writing your permanent notes also acts as a kind of self-test. Consider whether your thoughts still make sense when you write them down. Can you even express them in writing? Do you have all the facts and references you need at hand? When you write down your thoughts, you also distance yourself from them, which allows you to think more critically about your arguments. Daniel

Kahneman, the eminent psychologist, remarked that the brain is “a machine for jumping to conclusions” – it has a habit of filling in gaps and making connections and patterns that simply aren’t there. By writing, you externalize your thinking process. And this allows you to see facts and rationalize your thoughts more clearly.

Read with a pen in your hand.

Here’s a pearl of wisdom from Benjamin Franklin: read with a pen in hand. And, while reading, “enter in a little book short hints of what you feel that is common or that may be useful.” Luhmann certainly adopted this approach. As he read, Luhmann always had pen and paper close at hand. In addition to noting key ideas from the book on his index cards, he’d jot down bibliographical details on the reverse of the cards. After finishing a book, he’d go back through these ideas and see what was relevant to his existing notes. The key message here is: Read with a pen in your hand. Your ideas and thoughts will develop as you read more. And your slip-box, as it begins to fill with permanent notes, will itself become a treasure trove of ideas. It’ll stimulate your thoughts, and you’ll be challenged by the connections it presents. Consider the difference between this procedure and more traditional note-taking. Often, students take notes with no clear goal in mind. They copy swaths of text. They underline, they highlight. They scribble in the margins. Or they take no notes at all as they read. With a slip-box, the reason for your reading and note-taking is perfectly clear: to build on your previous notes and arguments. While reading and note-taking, you also need to be aware of your confirmation bias. Make a conscious effort to not only seek out arguments that confirm your current views or what you know already. Take Charles Darwin, for example, who regularly wrote down arguments that challenged his theories. As a result, he rarely encountered objections to which he hadn’t already responded. Luhmann kept his notes concise. Through habit and practice, he became an expert at keeping his notes simple but not simplified. The more you do this, the better you’ll become at it, too. And your note-taking will be reflected in your thinking and speaking as you become versed in explaining things with clarity. But remember that when you’re writing your permanent notes, you’re doing so for someone who may have general knowledge in the field, but perhaps doesn’t know the specifics and the original context. And that person . . . is your future self.

Your slip-box enhances your learning through elaboration.

Think back to your school days. Did you ever cram before a test? Hastily rereading texts in the hope that some of it would stick might have enabled you to retain enough information to pass the test, but it didn’t help you learn anything in the long term. Actually, if long-term retention was your goal, you might have been better off playing Ping-Pong. Exercise is an effective knowledge-retention aid, for two reasons. First, it helps you transfer information to your long-term memory. And, by reducing stress, it also reduces the hormones that suppress learning. So, if you want to learn something, should you simply play more Ping-Pong? Maybe – but what’s actually key to improving your learning is elaboration. The key message here is: Your slip-box enhances your learning through elaboration. Elaboration is when you think about the meaning of what you're reading and how it relates to your own thoughts, ideas, and arguments. And – surprise, surprise – when you take smart notes and look for connections with your other

smart notes, you are, in fact, elaborating. You automatically start to reflect deeply on what you've read. And this is what facilitates real learning. Time-consuming? You bet. But think about what happens when you don't elaborate on what you've read. You not only lose the opportunity to learn; you waste a great deal of time by reading without learning. But what about all those other learning techniques – flash cards, for example? Aren't they good for learning, too? Well, they're certainly better than cramming. But without context or elaboration, they're just not very effective. With your slip-box, your learning is enhanced because as it evolves, you evolve, too. As you purposefully build connections between notes, you build those very same connections in your head. And that web of knowledge, theories, and ideas gives you hooks on which to hang the next piece of information or argument, and so on. Each time you access information from your slip-box to connect new notes, you elaborate connections further, which creates a virtuous circle of learning. Once you develop your own Zettelkasten and learn how to use it effectively, you'll be well on your way to achieving maximum productivity and remarkable success.

Final summary

The key message in these blinks is that: Niklas Luhmann's Zettelkasten, or slip-box, is an innovative way to externalize your thoughts and build up a reservoir of ideas, arguments, and information. Used correctly, it'll become like a conversation partner and will ultimately make it easier for you to write academic papers, think more clearly, and improve both your long-term learning and understanding. And here's some more actionable advice: Make smart notes part of your reading routine. Next time you're reading, keep a pen and paper handy. Write notes on any interesting concepts or passages. Make this simple first step a habit – it'll encourage you to start taking permanent notes, and, as you start to build up your slip-box, to connect these with your other notes. Once you establish your new note-taking routine, it'll become second nature. Got feedback? We'd love to hear what you think about our content! Just drop an email to with How to Take Smart Notes as the subject line and share your thoughts!