



I focus and write

Starter Kit for a More Mindful Scientific Writing

by Ana Pineda, Ph.D.



WELCOME



Do you often struggle to focus and write?

Does thinking about sitting to write your paper simply drains you? Feeling like a punishment?

Do you feel you never have time to write?

Or when you finally have time, you write for 10 minutes and then you start procrastinating? Ending up wondering whether you're good enough to be a scientist?

If these situations resonated with you, I want you to know two things:

1) You're not alone. All these are the common struggles of hundreds of scientists that have taken courses with me inside "I focus and write".

2) You can build a different approach to your writing. Writing is a skill, which means you can learn it and will get better with practice. But it needs extra components we'll go through in a moment.

Before that, I want to briefly introduce myself... I am Ana Pineda, PhD, and I worked as a scientist for more than 15 years first in Spain, and then in top institutions in The Netherlands. There, I wrote dozens of articles, supervised the work of plenty of graduate students and PhD researchers, and worked as an editor in several journals, including the highly-recognized Journal of Ecology. And I had myself ALL those struggles I mentioned above.

And when we don't feel happy with our writing, we don't feel happy with our academic life.

That's the point where "I focus and write" was born, to help scientists like you have a more creative, productive, and happier academic life. And we do that by following a "mindful approach".

In this guide, I'll share the strategies that have made the biggest impact on the scientists I've worked with so that you can start making them part of your scientific writing system. And with them, you'll start your Mindful Scientific Writing journey!

Let's start!



What is Mindful Scientific Writing?

From combining the years of research experience with the work inside “I focus and write”, I am strongly convinced that to have a sustainable writing practice, you need to work on three components:

1) PRODUCTIVITY SKILLS

I regularly ask my students and other scientists in Twitter (you can follow me here!) what is stopping them from writing. And not having time is one of the top 3.

Nobody has time to write. You need to make that time.

But also, you need to learn how to manage all the projects that as a scientist you're part of: doing experiments, writing articles, getting funding, supervising students...

Time and project management are skills that are well-studied, and there are plenty of evidence-based strategies to work efficiently. The problem is that as scientists we often lack this type of training. You'll learn now some of those strategies!

2) WRITING SKILLS

*“I want to write an interesting discussion;”
“I want to write with confidence knowing what goes where;” “I want to clearly structure my paper”.*

These are some of the wishes I often hear. And again, I want you to know that writing is a skill. And that means you can learn it. During my PhD I learned to write by reading other papers. It worked. But it was a long and frustrating experience.

When instead of trial and error, you implement writing strategies that work, not only you'll be more efficient, but also more confident about your writing. And I want that for you!

3) MINDSET

Ohhhh this is a big one. A forgotten component in most courses and books about scientific writing. Continuing the top three, there is a group of obstacles that are stopping scientists from focusing, writing, and finishing their work in general.

Those obstacles are (among others!) perfectionism, procrastination, fear of being judged, and impostor syndrome.

Your critical mind may be telling you that you need to do more experiments, read more papers, or learn more English before you can start writing. Or to compare yourself with all your colleagues to realize you are not good enough to write or to be a scientist.

All these things are NOT TRUE. It's your mind trying to keep you safe from failing. And when those thoughts start coming, you need to kindly speak to your mind, tell it that you're safe, and keep taking action. Over and over. And with time and practice, the thoughts will come less often, and will leave you faster!

Now that we've spoken about the three components of Mindful Scientific Writing, let's start with some specific strategies!

1. MAKE TIME TO WRITE

Ok, you've accepted that writing is important. But the problem is that often does not seem urgent. To avoid the other "urgent things" taking up your writing time, you need to schedule your writing and defend it fiercely. Because what gets scheduled, gets done! You can choose an electronic calendar (I am a big fan of Google calendar), a traditional agenda, or [**download my free weekly planner**](#). It's fully customizable and what I've used for years!

The next step is to decide how frequently you'll write, and my advice is to write daily with compassion. Many creative and scientific writers praise they are most productive when writing in large blocks of time, ideally days (known as binge writing). But science does not back up this. In the amazing Twitter account of Hugh Kearns, he states that those who write only 30 min a day (snack or ninja writing) publish two more articles a year than those that wait to have large blocks of time.

Snack writing has many advantages: you become a quick starter, you can always make time for 30 min of writing, and the writing you are creating accumulates. This is one of my beloved "small actions with big impact".

As a PhD, I only could write when I had big blocks of time, even days! But then as postdoc I rarely had those long periods to just write. The result? I didn't write! It took me a while to build a new writing strategy combining both snack and binge writing. And this happens to many scientists out there.

Binge writing will always have a place in our academic lives. More complex ideas such as in the discussion, in a review paper, or in a grant proposal, often need a longer time to develop. So whenever possible, schedule longer blocks of writing too.

How to put this into action: [**Download my free weekly planner**](#), or go to the planner you already use. For the coming days, block every day as much writing time as possible. Ideally, during your "golden hours" (when you're most alert and motivated). Look in the coming weeks and try to block a full day or even days for writing.

It's ok if you need to reschedule things that are in your planner. Remember: as a scientist you're a writer, so writing should be a priority.

To learn more: You may enjoy my blog posts [**"The importance of scheduling writing time every day"**](#), [**"How to focus and write when working from home"**](#), or [**"3 reasons why writing should be a priority for you as a scientist"**](#).

2. SET CLEAR WRITING GOALS (the SMARTER way)

One of the big mistakes I did myself throughout my whole career was to set very general goals.

And then, I would not translate those into projects and those into tasks. That would look like writing in my planner and to do-lists, day after day, “Write paper”.

A task that took months (and sometimes years) to cross out.

As a scientist, you’re also a project manager. And you can start applying project management tools right now.

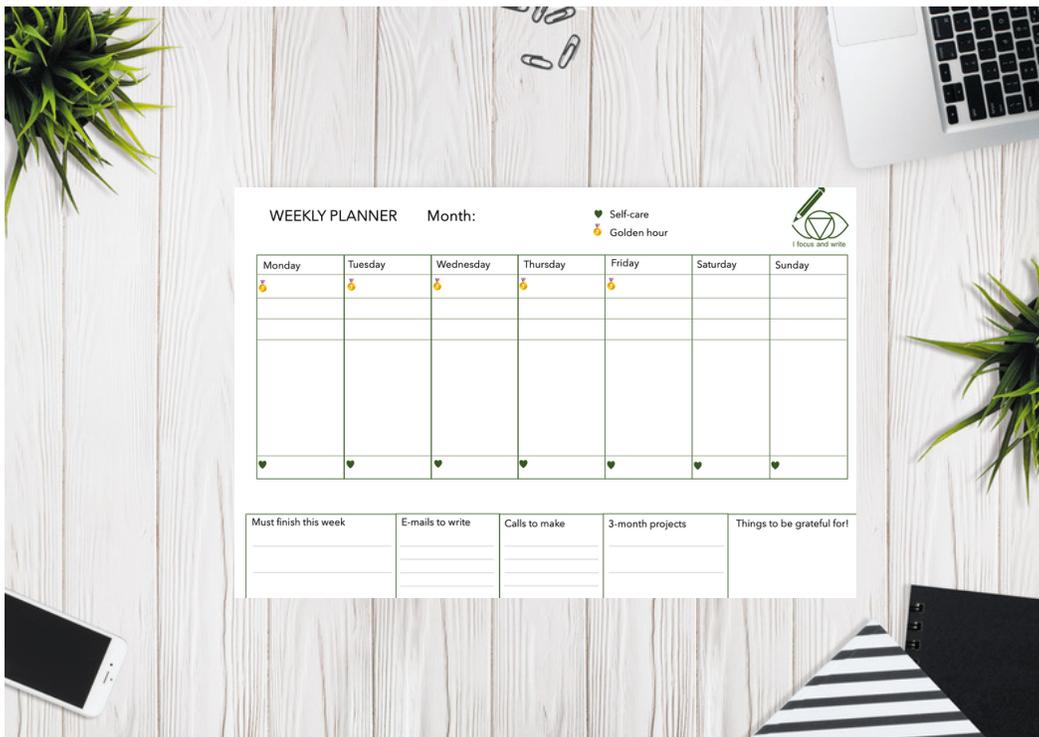
STEP ONE: Set SMART goals.

This is a specific methodology that will help you achieve those goals (not only the writing ones!). The key for the purpose of this guide is the “S” from specific. For example, a goal can be “Submit paper X to Journal of Ecology, before the summer”.

STEP TWO: Split goals into projects.

And one project can be “Write first draft of paper X”. This project will be different from “Revise with co-authors paper X”, and different than “Publish in Journal of Ecology paper X”.

When we don’t understand these projects as steps to reach our goals, the process can feel daunting.



STEP THREE: Split each project into tasks.

Which are basically like mini-projects. For example, “Write first paragraph of the introduction”, or “Edit the discussion”. The key difference is that tasks are what you should write in your planner, and ideally will not take longer than 1 day. They can be even smaller tasks that will take you 2 hours or even 25 minutes!

Why is so important you plan tasks and not projects?

Because crossing out those tasks inside your planner will give you a boost of motivation from seeing your progress. Not crossing out “write paper” for months, will eat that motivation.

And we don’t want that!

How to put this into action:

Go to your planner, and for the next few days, specify the writing tasks you’ll FINISH during the time you’ve blocked. Be very specific about the section, the paragraph, will be an outline, a last edit...It’s normal if some tasks take you longer than you had planned. You’ll get better at it! But be very aware of the perfectionist inside you stopping you from finishing ;)

To learn more:

In the context of setting yearly goals, you can [download this workbook](#) where I explain the SMARTER methodology. And you can always sign up to watch instantly my online workshop “[SMART goals for scientists](#)”. If you’re wondering in which section you should start writing your paper, you may enjoy [this blog article](#).

Click here to join me for the FREE masterclass “5 writing mistakes we scientists make and how to fix them”

3. PREPARE YOUR ENVIRONMENT

The key is to find a place with as little distraction as possible. For every distraction, it takes us 23 min to go back to the point where we were. You can do simple actions such as turn off notifications on your computer and put your phone in silence out of your view. This study showed that having it in a different room was even better than in your bag! If the temptation is too big, I always recommend using an internet blocker such as Freedom (yes, I bought it), or the free Forest app.

The physical space we choose to write can be very important for some of us, especially if you're sensitive to light, odours, etc. Here are some examples worth trying:

Your usual desk.

If you have an office for yourself, don't hesitate to place a sign at the door (funny ideas here). If you share space, let everybody around know you that you are in "writing mode" and do not interrupt you. And try using headphones with quiet instrumental music (unless you want to have all kinds of party memories and start singing along). I use playlists on Spotify.

Hiding in a crowd.

I had great experiences of productive writing like this. Libraries are designed spaces for this purpose, so explore those around you!

Or find a café where you don't know anyone (ideally with plenty of natural light). You can also try to hide in someone else desk...perfect for when you only have a couple of hours!

Hiding in solitude.

This is the Nirvana of most writers, but so difficult to achieve! So careful with getting too attached to this strategy (like I was). If you work from home (either yours or someone else's) you need to be very disciplined with distractions. A great alternative when you only have a couple of hours is to find an empty room or a lab in your workplace, there's always one!

How to put this into action: the first simple, and effective thing you can do, is to remove all the notifications from your computer and phone (no sounds, no red badges). Then, be sure that during that writing time you've scheduled, your email tab is closed and your phone as far as possible! If you feel strong, try not to check your email until you've done some writing (I know, this is advanced!). Lastly, select the space where you'll be writing the next few days and have everything ready to start!

To learn more: No more learning for this one. Just implementing! Stay strong, I know it can be difficult to defeat the media temptations :)

4. UNDERSTAND YOUR ENERGY

I always say that time is our most precious resource. It cannot be recovered. But if we don't manage our energy, time is useless. The good news is, that energy can be recovered! But before that, I want you to learn to understand your energy.

First, identify the mental energy that the tasks you need to do will require and consume. Then check how pivotal they are to reaching your goals. Based on that, you can prioritize those tasks!

To give you some examples (see the image below), writing the discussion of a paper is pivotal but it needs all my energy (whereas I find the methods much easier), so it is one of the first things in the day. Most of your meetings may not be so pivotal but they will require energy and may stick in your head for a while (especially if you are an introvert). For those tasks, you can either schedule them later in the day or give yourself time to regain that energy.

	Requires energy	Low energy
Pivotal	<p>1</p> <p>Write introduction/discussion Start/finish any project Statistical analysis ...</p>	<p>2</p> <p>Write M&M, results, figures Planning ...</p>
Non-pivotal	<p>4</p> <p>Content of a presentation Prepare a class Emails ...</p>	<p>3</p> <p>Revise other people's work Meetings ...</p>

Once you understand the energy that tasks will require from you, it's time to check the energy levels YOU have at that moment.

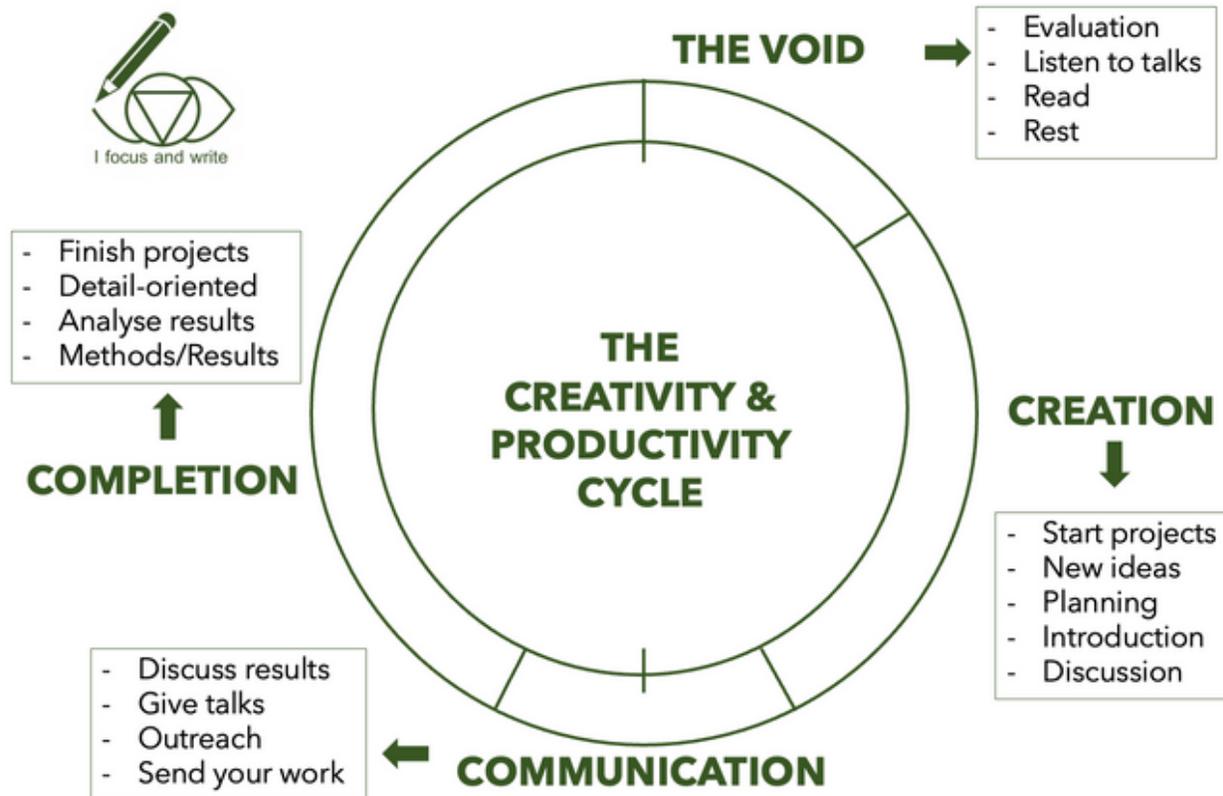
Creativity, energy, and productivity are cyclical. Every day we have one of those cycles. And they can come over and over, matching projects, months, or seasons.

And if you have a menstrual cycle, productivity can also match your menstrual cycle. This is something that has changed the way I and many of my students work, and I encourage you to approach it with an open mind!

Here in the illustration below you have some examples of tasks that you may feel in the different phases:

➤ **How to put this into action:** awareness is the most important step. Check how much energy you have throughout the day and month. Observe if you notice a pattern. Pay attention to the different tasks you do and the energy they require. Based on that, start planning your weeks and days! (you can grab here [my free weekly planner](#)). And treat yourself with compassion during low-energy moments.

➤ **To learn more:** If you're interested in learning how to incorporate energy management into your productivity system, together with time and project management, see my course [Mindful Productivity for Scientists](#). To read more about how to plan your writing around your menstrual cycle, [this article](#) is one of the most-read ones!



5. PRACTICE FREE WRITING

I love this quote from Louis L'Amour: *“Start writing, no matter what. The water does not flow until the faucet is turned on”*.

When you sit and force yourself to write, non-stop for 15 min (set an alarm!) it is like turning on that faucet, the words just come and you probably write for much longer.

This is a great strategy when you feel blocked, either to start or somewhere in between your writing. Free writing is not revising; if a word does not come just write XXX and continue, don't look back, just write. Of course, at some point, you need to review and go back, but wait until the inspiration, flow, or whatever it is, stops (or the 15 min alarm rings!).



Think that this text will be only for you, so don't worry about how it looks. Like every skill, with practice, you'll get better and better at it, so it is also great to schedule it whenever you are snack writing!

After you've started writing, it helps to leave a cliff-hanger before you stop. I usually stopped at a paragraph or a section, but I got this idea from the amazing book about Scientific Writing by Stephen Heard. When you continue a bit longer and start the next paragraph or section, it helps immensely to come back to the point where you were.

➤ **How to put this into action:** Put an alarm, switch off all your distractions, and write! You want to avoid to edit what you are writing, so changing the font colour to white can help. Free writing works wonderful right after a mindful break (ideas below).

➤ **To learn more:** Here, I highly recommend you to check my [Mindful Scientific Writing](#) course. You'll learn this and many other writing strategies to gain those writing skills we all need!

6. HAVE A MINDFUL PRACTICE THROUGHOUT THE DAY

The #1 enemy of creativity is stress. Being a scientist is a creative career. Maybe not the first one that comes to your mind, but you need that creativity daily! But I work daily with scientists that live in a stressed state. Practicing mindfulness throughout your day will help you calm your nervous system and improve focus and creativity!

Here I want to recommend you 3 practices for their efficacy and simplicity.

Meditation is the first one. During meditation, we are aware of our thoughts and we let them go without judgment. This helps to let our self-limiting and negative thoughts leave our minds, so we can focus on the writing (or on whatever you want!). If you're curious, I published this article in Nature on some simple steps to build a simple meditation routine as a scientist. Similar to writing, meditation is a skill so you'll get better with practice!

Breathing on the other hand, is the main tool we have to connect our mind and body. By paying attention to the air going in and out of our bodies, and extending the seconds we inhale and especially exhale, we can calm the mind.

“Diaphragmatic breathing” is especially effective to relax and increase attention. This is a type of breath where we visualize bringing the air to your lower abdomen (2-3 fingers below the belly button), letting the lower belly expand. By doing this we move the diaphragm and stimulate the vagus nerve (which is key in the parasympathetic nervous system), connecting body and mind.

Mindful walks are perfect for when you feel blocked in your writing. I recommend you start walking paying attention to your environment, your breathing, and the movement of your body. Then, on the way back to your desk, you can start telling mentally what you'd like to write. Once you arrive at your desk, write those thoughts while you practice the free writing strategy you read above.

How to put this into action: download the app Insight timer to your phone, and there, start with their course to start meditating. You can also get here my “meditation box” where we can practice together these three practices

To learn more: If you'd like to read more, have a look at my [article in Nature](#) (yes, I'm super proud!) or this article in the blog with [extra ideas](#) on mindful practices.

7. KEEP WORKING ON YOUR MINDSET

Scientists are thinkers. And over thinkers. That means we're constantly looking around us, comparing ourselves with others. Revising everything we do and thinking far too critically about whether it passes the perfection levels we often set.

But also, most scientists were good students. Who were not used to failure. Who found the reward in the result instead of the process.

The above, together with the special challenges of academia, means that most scientists, like most high achievers, share common mindset blocks that are stopping you from finishing your work in an efficient way and sharing it!

You can work on those mindset blocks. And I recommend you to follow a mindful approach:

- 1) Awareness, where you identify your limiting thoughts.
- 2) Answer back, and build an argument of why they are not true.
- 3) Keep moving forward... sending the imperfect draft to your co-authors, saying no to requests for which you don't have time, giving the talk that scares you so much.

And every time you do these hard things, you'll practice the courage muscle. Your confidence will grow. And so, your mindful productivity.

How to put this into action: write in your notebook a vertical line in the middle. On the left, list the not-so-nice things you tell to yourself when you're writing (I would tell myself things like "I am a terrible writer", "My boss will fire me when he realizes I know nothing"...etc.). On the right, write what you'd tell your best friend when they would share those thoughts with you. There you got a list of sentences to tell yourself (answer back) whenever those thoughts pop up (awareness). The last thing...breathe deeply 3 times and keep moving forward

To learn more: If you need a boost in motivation, you may enjoy [this article](#). If the reason you are having more of those mindset blocks than usually is a rejection, check [this article](#). You got this.



Fall in love with the
process.
Not with the result

Conclusions

And Action Points

So now, let's start writing. Most people that struggle with writing find "starting" the most challenging part. As a Chinese proverb says, "The best time to plant a tree was 20 years ago. The second best time is now".

So just open a word document, set a timer for 15 min, and practice free writing! Then be sure to schedule a writing slot every day of this and coming week and indicate where you will do it.

And very important, do a short meditation before you go home today, it can be as simple as 1 min breathing deeply with full attention to the air coming in and out. Remember, action creates momentum and momentum creates results! I wish you happy scientific writing.

Click here to join me for the FREE masterclass "5 writing mistakes we scientists make and how to fix them"

About the Author

Meet Ana Pineda



Ana Pineda, Ph.D., is a scientist, certified yoga instructor, and founder of "I focus and write", an all-in-one resource to help scientists write their papers, get things done, and have a productive, creative, and happy academic life. Her blog, free masterclasses, and online programs combine her passion for a new mindful approach to academic life with more than 15 years of research experience at top European Institutions, such as Wageningen University and the Netherlands Institute of Ecology.

Ana's work has been published in the journal Nature, and she has given talks for Oxford University and the British Ecological Society. Ana now lives in The Netherlands, where you can find her walking on the beach, doing yoga, or eating pannenkoeken with her husband and two children. Find her online on [Twitter](#) or at www.ifocusandwrite.com