

THE MOTIVATION TO WRITE

Writing can be a struggle, or it can be fun. Most likely it is both. The attitude with which we approach the writing project can determine its success. Lack of motivation and writer's block can prevent us from beginning, continuing, completing, and enjoying writing projects. This chapter provides strategies for overcoming these obstacles to our writing.

Many scientists hate to write. And it shows.

Some very smart people do not like to write, describing the process as too hard or not worth the effort. This issue is common, even among professional writers. American author and poet Dorothy Parker said, "I hate to write, but I love having written." What frightens horror author Stephen King the most? "The scariest moment is always just before you start [writing]."

Much of this intense dislike of writing may stem from childhood when many of us started losing interest in writing. Learning vocabulary and diagramming sentences can dampen a young mind's enthusiasm for creative expression. In addition, most writing assignments force students to write about topics they have little interest in.

We as scientists should be immune from those burdens. We write grant proposals about research we are excited to perform. We write papers about research results we are excited to communicate to others. Ideally, we, of all career-oriented people, should love to write, but some of us do not.

Often you will hear someone say that a particular person is a natural-born writer. Such trite sayings embed themselves into our consciousness, implying that writing is a skill that you either have or you do not. But, writing is not a quick process. Even if the initial draft flows easily from the brain through the fingers into the word processor, editing will take a substantial amount of time.

COMBATTING WRITER'S BLOCK

- ▶ Clearly define and focus the topic.
- ▶ Clearly define the audience.
- ▶ Write throughout the research process.
- ▶ Develop a plan for writing.
- ▶ Set an external or internal deadline.
- ▶ Motivate yourself by submitting your work to a conference.
- ▶ Make appointments with yourself to write.
- ▶ Create a writing ritual that puts you in the mood to write (e.g., favorite writing spot, certain time of the day).
- ▶ Break the writing project up into smaller components.
- ▶ Do not let “the editor” dominate during composition.
- ▶ Try stream-of-consciousness writing.
- ▶ Leave unfinished work for the next day.
- ▶ Meditate.
- ▶ Change your mode of writing. If you usually use a computer, try writing longhand.
- ▶ Do something different or creative for stimulation (e.g., knit a scarf, play your flute).
- ▶ Talk with others about your project.
- ▶ Get feedback from others on the draft manuscript.
- ▶ Do not procrastinate—it creates more stress to produce.
- ▶ Reward yourself for small accomplishments.

Sometimes we provide the excuse of “writer’s block” as if it were some kind of disease external to us, but the problem lies entirely within. One cause of writer’s block is having so much to say we do not know how to say it or how to start. In this case, the writer needs to focus the topic of the manuscript by limiting the content. Another cause is not knowing what to say, perhaps because of a lack of knowledge or a lack of understanding the assignment. Further research may be necessary to develop the theme of the paper.

Any writing project requires four things: something to write about, a means to communicate it, someone who will read it, and the desire to write it. We have already discussed the first three in Chapter 2. This chapter primarily addresses motivation and how to get it. Once you have the motivation, the mechanics of outlining, composing, writing, and editing will come.

5.1 THE IMPORTANCE OF ATTITUDE

A positive attitude facilitates the best writing. If you lack that positive attitude, ask yourself why. Many potential excuses arise out of fear: fear of not saying the right things, fear of the time taken away from other responsibilities, fear of missing the grant deadline, or fear of being judged on what you have written.

Remind yourself of why it is important to write this document. Remind yourself that writing records your methods and observations. Remind yourself that writing helps flesh out your arguments and makes your science better.

Remind yourself that you have other deadlines and the more quickly you can finish this writing assignment and do it well, the more time you will have to do something else. Do whatever it takes. For some, the impending deadline is the only motivation. (As we will discuss later, good ideas may arise under deadlines, but often the execution of those ideas is less than desirable because the attention to detail in writing needs time.)

Author and writing workshop instructor Darlene Graham recommends developing a sense of immediacy to your writing. Carry around a notebook or scrap paper to take notes on. Keep a pad of paper next to your bed if you wake up in the middle of the night with a great thought or phrase. Given opportunities to write all the time, we will.

Fairbairn and Fairbairn (2005) say, “[T]he truth is that writing is just a job, like any other—like washing the dishes, or mowing the lawn, or digging a hole in the ground. None of these would get done if you waited for the ideal time to do them.” Begin writing projects now! Do not wait until your children are out of college to write the Great American Journal Article.

5.2 REDUCING THE HEIGHT OF THE HURDLE

One way to avoid the pressure to produce is to write a little bit at a time. Begin writing before the research is done. Often research projects start with the author having performed a review of the literature and developing the data and research methods. Why not write them, or at least drafts of them, first while the ideas are fresh? Because these sections are more factual and descriptive, they may ease you into the manuscript more gently. In fact, most technical writers do not write linearly (introduction, data, methods, results, conclusion), just as most technical readers do not read linearly (Section 4.2).

Writing these sections early forces you to begin writing before the research is finished. Writing should strengthen your arguments. Allow the development of the paper to flesh out weaknesses in your argument, suggesting further sections needing to be written or further figures needing to be created.

Another strategy is to develop a plan to write the manuscript in pieces. The plan keeps you from being overwhelmed by a large writing assignment and allows you to focus on short-term goals. This advice can be helpful for people who only respond to deadlines or cannot see how to tackle a big project such as a thesis. When I wrote my Ph.D. dissertation, my advisors and I decided the best way to proceed was for me to write a draft of each chapter, and, when I finished with it to the best of my ability, to submit the draft to them. While I waited for their comments, I began writing the next chapter. In this way, we were able to make efficient use of our time. Because I anticipated seven chapters of my thesis and it was the end of the summer when I began to write, I budgeted the seven months from September through March to

I find that the creative process is continued into the writing-up stage of the more theoretical type of scientific paper. Clear writing is possible only on a foundation of clear thinking, and my attempts to draft a paper usually lead to considerable clarification of my thinking about the problem and often to further useful developments. —G. K. Batchelor (1981, p. 9)

complete my dissertation—one chapter a month. The first part of April was for final revisions and submitting it to my committee. I would defend in late April and graduate in May. The seven months and seven chapters provided a natural deadline for each chapter. I stuck to the plan and graduated on time. Such a system, however, implies that you accept responsibility for executing this plan and sticking to the schedule.

Do not overpromise your writing within too short a time, especially if it needs to be a quality product such as a published paper or a grant proposal. You may struggle writing some parts of the document, need to do some more literature research, or even rerun some simulations to refine your argument. Always be generous in your estimates, especially if you are working on a deadline. Start early.

Most of us are busy as it is. How do we find time in our schedule to write? Easy. Make the time. If your life is overrun with appointments, make an appointment with yourself to write. Set aside that time (at least several hours), close your office door, work at home or the library, and do it. Unplug your Internet connection, and turn off your e-mail. Focus. Pick an ideal time during the day when you are most focused. Is it in the morning? In the evening? After going for a run or playing tennis? Avoid writing after meals when your body slows down a bit. Clearing your schedule and your brain will allow you to focus better.

Furthermore, write when you have the urge to write. Take advantage of windows of opportunity when thoughts flow easily onto the paper. Such times are precious—rearrange your schedule if you find yourself in one of these moods. Do not let the editor side of your brain dominate. Do not lose momentum by fact-checking, looking up words in the dictionary, spell-checking, and surfing the Web. Ride the wave when it comes.

5.3 PREPARING THE WRITING ENVIRONMENT

Discover what style works for you. Do you like to compose in front of a computer or on paper? Do you like to write a detailed outline first or do you have more of a free spirit? Your personal style will greatly influence how you best like to tackle your writing. Try different approaches.

The environment you write in can make a big difference in your productivity. Some people can write anywhere. Others need a specific place designated as a writing space. Try different locations for writing to see where you can be most productive. Make the environment as inviting, focused, and efficient as possible. Some writers have an old computer stripped of all other applications except for word processing software. Sitting down to this computer means they are taking writing seriously. Make the room temperature and your clothes comfortable. Prepare your favorite beverage.

Set up a daily writing schedule. That is the best advice I can offer any aspiring writer. . . . After a few months of sticking to your schedule, you should be rewarded with an astounding improvement in your writing. If not, there's always computer programming.
—Patrick McManus (2000, p. 14)

Keep your writing lively by thinking of it like music. It is important to be grounded in the traditions of a particular form; but just as a great musician knows almost reflexively when to deviate from the form, so should a writer. —Paul Roebber, University of Wisconsin–Milwaukee

Prepare the resources you will need to write, and have them in front of you at a spacious desk or table. These items include all the papers you will cite (hardcopy preferred) and other reference material such as a dictionary, thesaurus, style guides, *Eloquent Science* (of course!), templates for manuscript formatting, and English–Finnish dictionaries (if your native language is Finnish). Not having these resources readily available will be an unnecessary distraction.

5.4 OPENING THE FLOODGATES

Let's say that we have set aside a whole week to start writing—how do we make the thoughts flow? To open up the creative writing process, we need to understand a bit about how the brain works. Both hemispheres of your brain—the left hemisphere (rules, science) and the right hemisphere (creative side)—are stimulated during the writing process, and both are needed to write well. While the left side is committing attention to details such as correct grammar and punctuation, obsessing about these details at the composition stage can prevent the creative expression from the right side. By excessively focusing on the left side, the connection to the creativity essential for good writing can be lost. The result is that we may think of ourselves as *bad* writers, losing the self-confidence we need to be *uninhibited* writers.

If fears from the left hemisphere are inhibiting your ability to write, turn it off. Just commit fingers to keyboard or pen to paper and forget about grammar and spelling. Do not even think about writing in complete sentences—write in a stream of consciousness. Beginning writing will open you up. Simply put, stop making excuses for why you cannot write and begin to write. Do not be afraid to put first drafts on paper or in the computer. Revisions can always be performed later. Often, this process of putting anything down accomplishes two things.

First, stream-of-consciousness writing can start the creative juices flowing. Even when impending deadlines and writer's block prevent you from writing, sit down and do it. Even a trickle of vapid thoughts about your topic may help open the floodgates eventually. Of course, do not flagellate yourself unnecessarily for not producing. Sometimes some of my best writing periods happened when I did not initially feel in the mood to write. As with a thunderstorm, a vast reservoir of convective available potential energy may be waiting to be released, if the cap can be breached.

Second, your initial draft, if flawed, suggests one way to approach the problem that may not work. At least you got it out of your system! A common aphorism goes, "It's easy to edit stuff—it's hard to create." Getting material, *something, anything*, out of your head into a computer file or onto paper is an essential, initial step to any writing project.

Many writers depend heavily on inspiration because it produces their best, most efficient, and most satisfying writing. Many believe inspiration comes from the outside and must simply be waited upon; most have no effective recourse when it fails. Unfortunately, many writing problems are thinking problems which inspiration is ill-adapted to solve. —Linda Flower and John Hayes (1977, p. 451)

If writing the introduction is challenging you at this moment, try writing sections of the paper that are ready to flow more easily. Work on the reference list or figures if you cannot get excited about writing the text. Waste no time thrashing about for the perfect start to your manuscript when other sections could be written instead. Alternatively, you can blow through the stuck material, writing “BLAH BLAH BLAH” to alert yourself to fill in this material later when your mind is functioning better. If stuck between two words or phrases, place both in parentheses, allowing you to pick the better choice later. Anything that can keep the brain focused on writing is fruitful.

Are you still looking for inspiration? If you find yourself in a deadlock, have coffee with your friends, and talk about your topic. Often just talking about the inability to write opens the floodgates. You may even wish to record conversations you have about your topic in hopes of capturing some spoken moments of brilliance that could be harnessed in your writing. In a similar vein, pretend you are writing a letter to a friend about your work in plain language.

Look for inspiration from other authors whom you admire (or least admire). Reading well-written journal articles could inspire you to similar levels of greatness. Or, pick up a manuscript that you dislike either because you disagree with it or because it is poorly written. Knowing that you can do better is often one way to motivate yourself. You may even try reading one of your own favorite works from the past. Reminding yourself that you once had written something really good can be a tremendous inspiration to achieve similar heights again.

Or you might do something out of the ordinary for inspiration. Go to a museum and be inspired by the art. Take a walk in the forest. Visit a historic place.

If your day is over, you might try writing a note to yourself about the topic you want to write next or even writing the first few paragraphs of the next section, then walking away. “Leaving water in the well” was what American writer Ernest Hemingway called it. That way, the next time you sit down to write, your mind, either consciously or subconsciously, has been preparing for that topic.

Finally, when you reach those milestones you set for yourself—the first chapter is written, the draft is in the hands of the Ph.D. committee, figures are done—celebrate a bit. Go to a movie or have dinner at an expensive restaurant. Take a day trip that you have been dreaming about for years. Reward yourself with something enjoyable for the accomplishment. Remember that carrots generally work better than sticks.