If a study is conducted and no one is able to read about it, does it make an impact? In most cases, the answer is a resounding "no." Writing is what makes science real and usable to others. Writing is also what enables scientists to succeed. In the fiercely competitive world of academic science, where the mantra is “publish or perish,” it is more important than ever for young scientists to develop good writing habits.

Yet writing does not lend itself to a one-size-fits-all approach. For example, Jay does his best writing—including this column—in the late afternoon before he races to pick up his kids from school. June, on the other hand, prefers the quiet of the morning alone at a coffee shop in her mountain college town. We propose that you act like a scientist and try these three simple writing “experiments” designed to enhance your writing effectiveness, efficiency, and even enthusiasm.

**Experiment One: Embrace Revision**

Let’s be perfectly honest: Writing an academic paper can be a real slog and it often takes weeks, if not months. It is common for academics to go through countless revisions of their manuscripts. In this experiment, you should be prepared to rewrite sections of your draft until it is as polished as possible. Whether it’s a report, a review article, or a research paper, be sure to review the literature and cite relevant sources. Even if you’ve taken these steps, you might need to rewrite your drafts many times before they are ready for submission.
and co-authors. In science, editing is an act of love. It means that your colleagues have taken the time to engage deeply with your work and are investing their time to make it better. They are also making you a better writer in the process.

Last month’s Letter to Young Scientists
The team-written Letters to Young Scientists column offers training and career advice from within academia.

School’s (somewhat) out for summer: Five tips to help academics make the most of the season

Both of us have been on the end of critical, but helpful, comments from mentors and collaborators. When Jay was working on his first scientific paper with his graduate adviser, he initially cringed at the sea of red ink after every draft. But the paper was much better for the efforts, and it was eventually published in a top journal. When June received extensive feedback on a paper from a valued senior colleague, she showed it to her graduate student as a good example of the infamous red track changes that are a vital ingredient to better writing.

Remember: You are not your paper. Let go of your ego and embrace the opportunity to grow as a writer. As professor Keith Baar noted in a viral tweet about writing (and receiving edits on) academic papers, “This is a process. No one starts perfect.”

Experiment Two: Create a writing group
In Jay’s first year as a faculty member, he struggled to find time to write amid his various new responsibilities, which included teaching, administration, mentoring, and parenting. The old days of waiting to work through a paper until he had several open days on his calendar had disappeared—forever, as it turns out. With reams of data piling up and a ticking tenure clock, he needed a new approach to writing.

By fate or luck, he stumbled upon Paul Silvia’s book How to Write a Lot, which lays out several concrete strategies for building a writing routine—including starting a writing group. Jay reached out to his junior colleagues in his department and three of them were willing to try it out.

The aim was to set explicit, concrete goals and maintain social accountability—two critical elements of accountability. The group set explicit, concrete goals and maintained social accountability—two critical elements of accountability. The group met every second week at a café. We would order coffee and spend an hour going over our progress toward the goals we had set at the last meeting, as well as publicly committing to several goals for the next 2 weeks. The goals were concrete, including a target number of hours we wanted to write each week. We also laid out goals related to certain projects, such as outlining a new paper, drafting a methods section, analyzing data, drafting a review.

Becomes a Member
Log In ScienceMag.org
response letter, or reviewing page proofs. If any of us failed to meet our goals, we were forced to pick up the coffee bill. This small incentive—rarely more than a few dollars—was enough to keep us accountable.

In a few months, our writing group imposed structure on the rest of our activities. Before starting the group, Jay always tried to clear his email inbox and finish any other responsibilities before turning to writing. But this strategy became impossible as a new faculty member. To avoid buying his colleagues coffee each meeting, Jay shifted his schedule to block off 2 hours every day to chip away at his writing. Writing eventually became a habit, and Jay started to automatically prioritize it over other tasks, opening a document and typing instead of getting buried under email.

The group also offered insights and support to help respond to journal rejections, address challenging revisions, navigate the grant system, and cajole collaborators into sending comments on our papers. And it was the most enjoyable event of the week—a chance to get out of the office and spend time with friends, celebrate one another’s successes, and laugh about the absurdity of the publication system.

The same system works well at almost any career stage. Jay has now started a monthly writing group for his lab—only in this case, he picks up the bill for lunch when they all meet their goals.

**Experiment Three: Write a paper in a day**

Every few months, we would notice a group of smiling faces on Facebook posted by our colleague professor Jennifer Tackett with a caption “Another successful paper in a day!” It sounded too good to be true. How could a group of scientists pull off the impossible and write a paper in a single day?

After a few years of these tantalizing photos, Jay finally set aside his skepticism and tried it out himself. He sent out an invitation to his lab members and had a number of his students and collaborators take the plunge.

All the authors booked a large chunk of time in our calendars and came to the meeting with our computers, ready to write a paper in a day. We had also taken Dr. Tackett’s advice and done some necessary background work to get the most out of our time together. We divided up responsibilities: One person would draft the methods, another would conduct some additional analyses and add them to the results section, and the third author would draft an introduction. Then we all put our heads down and wrote. Every hour or two, we would rotate sections to edit and fill in any missing content or references. When one of us had a question, we would pop our heads up and solve it on the spot, fleshing out the theory on a whiteboard or sorting through some results on a laptop.
everyone in the room made for a more enjoyable and creative environment for everyone, and it saved the tedious (and often contentious) emails back and forth trying to troubleshoot an analysis or understand why a collaborator is using a different term than we may like. It also made the paper better. Working through our disagreements and blind spots allowed us to get on the same page and left us more excited about the paper than when we began.

Our experience was such a runaway success that we now apply this approach to almost every paper we write. It can be especially helpful for those projects that are lingering in the file drawer and may require a concerted effort to push them over the finish line.

These are, of course, just a few strategies for making your own writing more effective. We challenge you to try out the writing experiments above to see what works best for you. And you may even enjoy it, too!

Send your thoughts, questions, and suggestions for future column topics to letterstoyoungscientists@aaas.org and engage with us on Twitter.

Read more from Letters to Young Scientists

Posted in: Letters to Young Scientists, Column, Non-disciplinary
doi:10.1126/science.careedit.aay5007

Jay J. Van Bavel
Jay J. Van Bavel is an associate professor of psychology and neural sciences at New York University in New York City.

June Gruber
June Gruber is an assistant professor of psychology and neuroscience at the University of Colorado in Boulder.

More from Careers

For academics, what matters more: journal prestige or readership?

Skydiving taught me I can land on my feet—in my life and career

Become a Member

Log In  ScienceMag.org  

https://www.sciencemag.org/careers/2019/06/struggling-your-academic-writing-try-these-experiments-get-words-flowing

4/8
Search Jobs

Enter keywords, locations or job types to start searching for your new science career.

Search

Search

Register

Advanced Search

Advertisement

Notre Dame Institute for
ADVANCED STUDY

Call for Fellows for 2020-2021

The Notre Dame Institute for Advanced Study (NDIAS) seeks applicants for its residential fellowship program from scholars, scientists, and artists with interdisciplinary projects on core issues that affect our ability to lead valuable, meaningful lives. New for 2020-2021, the NDIAS has organized a theme investigating the nature of trust. Fellows receive up to $90,000, subsidized housing, research funding, and a faculty office. The application deadline is September 16, 2019. For more information, please visit ndias.nd.edu.
How I learned to teach like a scientist
By Sally G. Hoskins | Jun. 13, 2019

It's OK to quit your Ph.D.
By Katie Langin | Jun. 25, 2019

Racial and gender biases plague postdoc hiring
By Katie Langin | Jun. 3, 2019

Read the Latest Issue of Science

ECOLOGY
Mite fight

MEDICINE/DISEASES
Once-a-year implant shows promise against HIV

SCIENTIFIC COMMUNITY
Vaunted diversity program catches on

ASTRONOMY
New tactics clash on speed of expanding universe

Become a Member
Indonesia gets tough on foreign scientists
Struggling with your academic writing? Try these experiments to get the words flowing | Science | AAAS

https://www.sciencemag.org/careers/2019/06/struggling-your-academic-writing-try-these-experiments-get-words-flowing