Priting Maketh an Exact Man by Andrew Pudewa



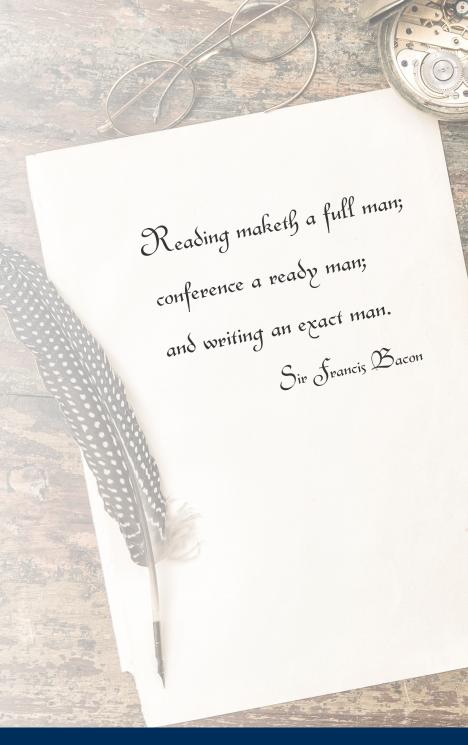
Recently, we at IEW began the process of acquiring a very high output (and rather expensive!) printer. During our initial conversations pertaining to the financing of this purchase, the manufacturer's national credit manager asked me a couple very legitimate questions, which paraphrased were thus:

- 1) Given the push in schools towards the "paperless classroom" and the increase of screen-based education, will there still be a demand for paper books in schools?
- 2) With the rapid development and availability of large language model AI applications, particularly as they apply to the task of writing, do you think people will still see grammar and composition as important things to teach?

These are fair questions from a credit manager's perspective. My response to both was the same. Yes, but why?

Answering these was a good exercise.

First, as it pertains to the teaching of reading and writing, is learning to write on paper better? The research is unambiguous: paper is not only better, it is far superior. Children's comprehension of text on paper is consistently better than when reading on screens.¹



Writing on paper activates areas of the brain that are not stimulated by typing, in particular the intuitive and creative areas.² Handwriting—and especially cursive—helps students develop speed and confidence.³ While some schools are careening down the slippery slope of forcing all reading and writing practice onto screens and keyboards, they likely are ignoring the consequences of failing to teach children how to write on paper. If children don't learn and practice handwriting in childhood, they not only will miss the neurological and personal benefits, but

they also may grow up to be adults who are unable to produce a handwritten letter or document of any sort. Have these schools really thought through the impact of this omission on a generation of students who may never develop this basic human ability? I would hope that most parents and teachers would object to this change and insist their students learn to write on paper before being pushed to type everything. Fortunately, learning to write on paper is still happening in many

education communities with excellent results.

Second, should we really spend our valuable time teaching grammar and composition if an AI-powered computer can produce a report, summary, essay, or email as well or better than an average human? Isn't the need for us to do that now obsolete? Is it worth the time (and pain) to teach English language arts? While we might try to make the argument that no, the best AI writing is not as good as the best human writing, most people don't need (or care) to have the best writing possible. AI will undoubtedly improve at approximating the best the average human can do. So why teach writing if we won't need to write?

One answer can be found in the analogy of math. Why do we teach math if calculators and computers can perform all math with much greater speed and

accuracy than any human? If we don't learn math and instead learn only how to use calculators, we quickly lose the ability to think mathematically, including our sense of number and distance and time. We become unable to see arithmetical relationships, to have an intuitive sense of proportion, and to reason well using appropriate quantitative tools. Some people even argue that we should abandon the memorization of basic math facts like multiplication tables since all students now have calculators or that we should eliminate algebra from the curriculum since no one

really uses it anymore (except the very few who do).

Another comparison might be made with music. If AI can generate music as good or better than most humans, why learn music theory or composition? Why bother learning to play an instrument at all? A similar comparison can be made with art. Why bother?

To give up on the teaching of writing might have even more severe consequences since writing is truly the distillation of thought as Jordan Peterson

argues. It is the best way to sort through the mishmash of notions that continuously storm in and out of our minds and to prioritize those thoughts which are worth our serious attention. We sift, refine, and articulate ideas with words, aching for an exact rendition by choosing just the right words in the right order to preserve insights in the right way. This forms conscious contemplation. While AI can predict with high accuracy text based on what other writers (and AI agents) have written, it entirely fails to teach us about ourselves and our own minds the way composition does. Additionally, depending on AI for writing will hinder us in two other significant ways.

Technology will atrophy the skill it replaces. Give children spell-checkers, and they will stop believing that learning to spell has any value, thus depriving themselves of a more intimate knowledge of the

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words they use every day. Give them grammarcheckers, and they will believe that computers are better judges of correct language than they are and thus stop caring about understanding the structure of their own language, losing any sense of discernment about its form and beauty. Give them Al to write their reports, essays, and emails, and they will no longer care about the precision in which their own minds and hearts are reflected in the words they produce. Perhaps even more dangerously, students who rely on AI (not just as a research tool but for a finished product) will be slowly duped into thinking that they created something they did not. If they believe that they formed an argument and found the means to support it when in actuality they did not, they will be deceived into believing that they have learned how to think well, or even that the AIgenerated text does reflect their own thinking, thus becoming hostage to a non-human agent. Should this become a habit, their intellectual freedom will gradually be lost as they live always looking to a machine to replace their innate human faculty.

"Reading maketh a full man; conference a ready man; and writing an exact man." With a perfect economy of words, Francis Bacon articulated the truth that the skills of reading, speaking, and writing extend far beyond any practical application to that of character and humanity. I want to be "full, ready, and exact" in every way possible, and I am confident you want your children to be so as well. Thus, it is time now to double-down on the teaching of the arts of language, not a time to abdicate our human faculties to technology.

Thus, we at IEW will continue creating and printing (now even faster!) paper materials to help you teach your students not just spelling, grammar, and the mechanics of writing but also the process of learning how to collect, organize, and articulate thoughts with skill and confidence. In the future there may be two groups of people: those who mainly rely on technology to simulate thinking and those who have cultivated and preserved the greater wisdom that comes with exactness in thinking—through writing.

Notes

- **1.** Park, Jihyeon, and Juhee Lee. "Effects of E-books and Printed Books on EFL Learners' Reading Comprehension and Grammatical Knowledge." English Teaching, vol. 76, no. 3, 30 Sept. 2021, pp. 35–61, https://doi.org/10.15858/engtea.76.3.202109.35.
- **2.** Berninger, Virginia W., et al. "Early Development of Language by Hand: Composing, Reading, Listening, and Speaking Connections; Three Letter-Writing Modes; and Fast Mapping in Spelling." *Developmental Neuropsychology*, vol. 29, no. 1, Feb. 2006, pp. 61–92, https://doi.org/10.1207/s15326942dn2901_5.
- **3.** Klemm, William R. "Biological and Psychology Benefits of Learning Cursive." *Psychology Today*, Sussex Publishers, 5 Aug. 2013, www.psychologytoday.com/us/blog/memory-medic/201308/biological-and-psychology-benefits-learning-cursive.

Andrew Pudewa is the founder and director of the Institute for Excellence in Writing and a father of seven. Traveling and speaking around the world, he addresses issues related to teaching, writing, thinking, spelling, and music with clarity, insight, practical experience, and humor. His seminars for parents, students, and teachers have helped transform many a

