Dumbing It Down: Don’t Stop Until You’ve Reached The Low 5’s

Robert Lefterman, Full Moon Bay, California

In 213 BC, Emperor Ch’in Shih Huang Ti (c. 259-210 BC) ordered the destruction of all the writings in the entire country, other than his own edicts of course. Everything his apparatchiks could get their hands on was destroyed, every scrap of countervailing knowledge that preceded this king, such as texts of rabble-rousing claptrap like Confucianism. 22 centuries later, in 2002, the People’s Republic of China similarly banned a then-current form of the library, namely the Google worldwide web search service.

Beginning in the 1930s until stopped by the defeat of the Nazi government in World War II, Adolph Hitler (1889-1945) ordered the mass incineration of books, not to mention several million human beings, that did not fit in with his worldview. In the 1950s, Senator Joseph McCarthy (1908-1957) blacklisted any liberals he didn’t like and kept their books, plays, and movies from being produced and distributed.

These and other attempts to eliminate the continuity of scholarship that has been passed down from century from century, to wipe out civilization’s storehouse of knowledge simply because it doesn’t follow one party line or another, are as frightening as they are contemptible. But they are weak also-rans in the history of censorship when compared to the evil juggernaut known as Flesch-Kincaid.

My first acquaintance with the dreaded Flesch-Kincaid, a debilitating disease of the mind that has spread to endemic proportions in learned circles, came one fine spring day when the newly hired editor of my research
institute paid me a visit about my paper, the paper that had cost me 2½ years’ work, countless late nights pouring over statistics and footnotes, and numerous burdensome trips to remote archives. And one marriage along with the estrangement of 3 children — or is it 4? but I digress — the important topic is the paper, my magnum opus, which was in pristine format, ready to submit.

“Charming draft,” he said, emphasizing the word “draft” with some uncanny knowledge of how that rough-edged implement would poke against a nerve, with “charming” added to increase the distressing effect. I involuntarily withdrew my hand prematurely from the handshake.

“But tell me, surely I’m not the first to let you know your work requires a bit of, how shall we put it, … editing?” The word “editing” cut me like the surgeon’s scalpel. “I assume you are aware of the intellectual diversity pedagogical criteria promulgated by your Federal funding source and ascribed to by this institute? I was just chatting with the Director about it coming up in the elevator a few moments ago.” My eyes widened, my mouth opened, but I couldn’t think of anything to say. He looked at me studiously, as if he wasn’t sure I understood what an elevator was.

“You see,” he went on cheerfully, ignoring my silence, “from a pedagogical assessment standpoint,” … (good lord! He had already used the P word and I hadn’t even been able to react to his first few blows) “… your writing, while no doubt filled with potentially useful facts and figures, …” (Potentially!) “… how can I put this gently … is deficient in accessibility from a usability assessment standpoint.”

Someone criticizing your work because it is “deficient in accessibility from a usability assessment standpoint” is like somebody saying they hate the way people use foreign phrases instead of ordinary English, concluding their
criticism by saying it’s no use complaining because *plus ça change, plus c’est la même chose.*

“Knock, knock? Is the doorbell out of order?” The editor peered at me expecting some response. Once again my counter-attack consisted entirely of an expression on my face that must have resembled that of the trout that suddenly finds itself flopping around on the floor of a rowboat whereas moments before it was peacefully swimming in the lake.

He went on: “The assessment metrics don’t lie. Your exclusionary treatment of the subject has made it virtually impossible for 93% of the middle school students in the country to read your paper in less than 15 minutes. When we employ the appropriate assessment *instrument …*” (did he pause here deliberately to make me re-live the experience of the way my doctor recently administered the *instrument* called a sigmoidoscope?) “when we employ the appropriate *instrument,*” he repeated, “you can see for yourself what you’ve done. Here are the results. It’s Grade Level 11.2 on the Flesch-Kincaid index. Pedagogically speaking, there are no 2 ways about it.”

I am normally a patient man, but that popped my cork. I blurted out — OK, I yelled — that I didn’t need any pedophiles — a slip of the tongue, but my intent was clear that I didn’t need any pedagogues evaluating my work thank you very much. I showed him a thing or 2 by proudly walking out on him.

However, what I literally walked out of was my own office, and after a trip to the rest room and the water fountain, I had nowhere to go but to stand in the hallway, held hostage by the occupying forces in my office. I was feeling more awkward by the second as colleagues passed by and I had to feign being deep in thought, jotting down notes on a paper napkin I pulled from my pocket. After 10 minutes, I walked back in prepared to tell him exactly
where to go — out of my office and to hell — but once again he got in the first word.

“So, if we’re done with our tantrums, perhaps I could spend my time most effectively by giving you a brief tutorial. Now what I’ve done here is make a few changes to your paper so you can learn how much improvement we can attain when we just put our minds to it.” My god! The man was sitting at my desk, using my computer, invading my hearth and home!

“Let’s just take one sentence as an example: ‘The standard deviation is 2.9 years.’ Now if we just push the button and use the “readability statistics” feature of your word processor under the “Spelling and Grammar tab” … oh my. You can see for yourself: The Flesch-Kincaid Grade Level is 12.

“Flesh what?” I stammered?

“Dear me, I know it by heart from US Department of Defense standard DOD MIL-M-38784B, but I haven’t the time to give you a seminar on the topic. The point is, you’ve hit grade 12 on the scale — do you know how many readers with lesser skills you’re excluding? Now let’s just change that awkward figure 2.9 to a nice round 3 —

“You can’t change my values!” I heard myself scream, wondering after the fact how far down the hall my voice was carrying. “The square root of the individual variances from the mean was 2.9, not 3,” I continued, controlling my emotions, “You would be increasing the reported value by, let’s see…about 3 … 3.4%! ”

“There you go with those complicated little numbers again.”

“And the decimal place implies the degree of precision in the underlying measurements,” I confidently concluded.

“So we just push the button …” (he was ignoring my rational statement as if I weren’t in the room) “and … voila! Grade Level 8.3. Success!”
“I suppose if we could reduce all scientific discourse to the fifth grade level it would merit a medal?” I asked sardonically.

“Oh come now,” the editor went on, “I routinely achieve the low 5’s with just a little effort and skill. We’re picking up speed now. Now let’s look at this term ‘deviation’; isn’t it unnecessarily long. If we just change it to ‘deviant’ —”

“Deviant!?” I thundered. Too late to keep those rarefaction-compression sound waves from already reaching the ears of my colleagues down the hall. I’m not the sort who usually shouts out words like “deviant” at work. This was a bit out-of-character for me.

“— and with that additional little change, we have … 6.4. Do you realize we have just cut our Flesch-Kincaid Grade Level for this sentence from 12th grade down to 6th?”

“And if we went down a whole phylum and ‘achieved’ the level of the invertebrates, would it merit a Nobel Prize?” I queried him sardonically, intending my sharp wit to make a palpable hit this time.

Torquemada the Editor didn’t dodge, didn’t strike back; he just acted as if what I had said was stupid, not sardonic or offensive: “Please, don’t even suggest such words. You’d blow your Flesch-Kincaid index sky-high. Now let’s get back to work. Do you see the potential if we just apply these methods throughout your paper? Now let’s look at this sentence. ‘The test results for the Poughkeepsie and Schenectady samples are shown in Table 4.’ Trying to impress us with big words? If instead of Poughkeepsie we just substitute, say, New York City — one of my aunts used to live in Poughkeepsie and I recall it’s just a hop, skip, and a jump via the train to Grand Central. And as for that cumbersome ‘Schenectady,’ it’s right next door to Albany. Now we push the button, and … just as I thought, we have cut a full 2 grade levels off the readability index.”
“But the sites where the data were collected were in Poughkeepsie and Schenectady — not New York and Albany,” I implored. Surely the stark facts spoke for themselves. My usability assessment editorial expert frowned, then looked exasperated. We debated the issue. How could it be an issue — aren’t facts supposed to be facts?

Some minutes later, with sweat now dripping freely down my face, I heard myself compromising: “We” would keep Poughkeepsie; however we agreed to trade away Schenectady for Albany. I was feeling a bit light-headed, like when you have a fever with the flu. I had the uneasy flashback of playing Monopoly with my neighbor Jimmie when I was a 5-year-old and he was 10, being coerced into trading away Park Place and Boardwalk for Baltic and Mediterranean. The last I recall, the editor was saying that a picture is worth a thousand words so why didn’t my paper have any?

Sometime late in the afternoon the following day, I was wondering why I had been watching Alfred Hitchcock movies the past 24 hours and then realized I hadn’t been. I regained my composure and got over my sense of paranoia and victimhood.

I pulled myself together, went into the institute’s office of the chief scientist, and put my case before her. She was sympathetic, in fact she was concerned. She had already heard of my meeting with the editor. She insisted on having me take the afternoon off, even having a taxi drive me home, so I knew she was on my side. She would have someone on her staff see to the submission of my paper personally and also talk to the editor. Of course, I said, I had to have my paper published exactly as I had written it. Scientific, scholarly standards had to be maintained. Facts are facts. The caring way she nodded her head indicated she agreed with me completely, and she chimed in that “facts are facts.” “To hell with Flesch-Kincaid!!!” Well,
OK, I was the only one who yelled out that last statement, and it seemed to make her jump noticeably, but she was definitely my ally on all points.

The experience with the editor had been humiliating, but over the next few weeks I managed to use that spatula known as the survival instinct to scrape myself off the pavement and re-shape my professional life.

One ordinary Tuesday (should I write that down as “2’s Day” to improve my readability score? Ha, ha!) an eMail message arrived, informing me that my paper had been accepted. The blessed event had finally occurred. Everything was OK. I was elated to the point of chuckling. Well, perhaps it was more of a prolonged giggle, or as I overheard one colleague at the water cooler say, “Did you hear him cackle uncontrollably? Getting that paper published sure means a lot to him.”

Frankly, I accomplished no useful work the next few weeks, preoccupied with the thought of being able to hold the journal in my hands and see my career-defining paper. The librarian of the institute was grilled by me as to whether the library’s copy would arrive earlier than the one destined for my mail stop. I quizzed the mail cart person on the same point. I gave them both my cell phone number in case the journal arrived when I was out of my office for a lengthy period, such as being in the cafeteria for lunch.

Then it came. I opened the glorious journal, less than a pound of paper but as valuable as if it had been platinum. I flipped (pawed) through its pages, too impatient to use the table of contents, looking for my precious paper, which I had titled:

“Probabilistic Multivariate Emulation of Longevity: Medieval Osterreich and American Light-Industry Workers.”

I had not only memorized the title — it was my daily mantra.
As I frantically flipped the pages, I spotted my name. Then I read the largest print on the page, the title:
“Pro-ballistic Multivitamins for Long Emus, Medium Ostriches, and Light American Industrial Workers.”

I read on to convince myself it wasn’t true, but it’s damned hard to read 10-point type when your hands are shaking as hard as if they’re trying to reproduce the near-field ground motion of a magnitude 8 earthquake, not to mention your eyes filling with tears. There in the first few paragraphs I could see one tell-tale sign after the other: Somehow the version the institute had submitted was not mine, but rather the Flesch-Kincaid version that had been “fixed” by the pedagogical assessment expert the way a pet gets fixed when it goes to the vet, except that this was worse — this was like the Cocker Spaniel waking up from the anesthesia to not only find something important missing but to see pigs’ ears grafted on his head.

I set the journal down on my desk, then picked it up and opened it to my paper again as if the bad dream would thereby go away, but no: The disaster was real. The “standard deviation” clearly was printed there on the page as “standard deviant,” and it was “3” not “2.9.” The data were obtained in “Albany,” not “Schenectady”; the “second empirical verification” came out “very Second Empire”; “Acknowledgements” was “Knowledge.”

I was finished, kaput, done for. I was washed up. I turned the page and saw the figure that had been inserted. Correction: I wasn’t washed up, because I had now plummeted to the bottom before I had any chance of escaping this shipwreck and dragging myself up on shore.

And, a week later, I was also $50,000 richer when it was announced that I had won the Intellectual Diversity Award for my paper, a prize funded by the premier Federal Science agency in my field. The plaque cited my accomplishments in “pedagogical excellence and learning strategy accessibility with regard to holistic methodologies”
(which, by the way, is a phrase that maxes out at Grade 12, but then, what’s good for the goose isn’t necessarily required medicine for pedagogues or Federal governments).

Highlighted at the top of the plaque was the key reason I won the award: the number 5.3 in large bronze numerals, followed by those lovely words, Flesch-Kincaid Grade Level Readability Score. The editorial usability expert was right — you can make it into the low 5’s with a little effort and skill.
Figure 1: Emu (abdomen left, head right) and ostrich (abdomen right, head left)

*Pro-ballistic Multivitamins for Long Emus, Medium Ostriches, and Heavy American Industrial Workers*