Is the COVID-19 crisis the tipping point for online learning? The crisis has forced schools and universities to close, pushing often unprepared institutions to move teaching and learning online or at a distance. This was not a decision we, as educators, took with great deliberation—it was forced on us by the situation. To be fair, educators have done, and will continue to do, the best they can, under the circumstances.

It is also true that, one day, this storm will pass. Or maybe it will evolve into something else. What is clear, however, is that the choices we make today could have significant consequences for all of us for years to come (quoting Yuval Harari in his piece *The World After Coronavirus*). He goes on to write:

Decisions that in normal times could take years of deliberation are passed in a matter of hours. Immature and even dangerous technologies are pressed into service, because the risks of doing nothing are bigger. Entire countries serve as guinea-pigs in large-scale social experiments. What happens when everybody works from home and communicates only at a distance? What happens when entire schools and universities go online? In normal times, governments, businesses and educational boards would never agree to conduct such experiments. But these aren’t normal times. (Harari, 2020)
I have been in the educational technology field for almost three decades now. And I would not be in the field if I didn’t believe that technology has a great potential to transform education.

That said, over the past few years I have become increasingly concerned and skeptical about how this potential actually plays out: which aspects of technological potential are emphasized and which get ignored; how certain views get essentialized and normalized and which do not; who gets to control the discourse and who does not, and most importantly, on whom does the burden of it fall.

It is clear to me that we need to approach the decisions we make today with caution and humility. And, we, the technologists, need to step out of our boxes and be willing to learn. We need to talk to historians, philosophers, artists, and humanists; people who have thought deeply about these issues, not necessarily from a techno-centric perspective.

We need to speak to, and more importantly listen to, contrarians, people whose ideas upset us, because that is the only way we can get better at what we do.

One of the people who I have always regarded as a thoughtful and insightful thinker about technology and society is Neil Postman. Back in 1998 (eons ago in terms of technological change) he delivered a talk in Denver titled *Five Things We Need to Know About Technological Change*. What he said that day, 22 years ago, is as relevant today as it was then (maybe even more so). He brings to the conversation over three decades of studying the history of technological change. He adds, however, that he does not consider these ideas as being...
ourselves, who benefits from this shift? And who does not? Which organizations, corporations, and industries will prosper and which ones will wither? Who will control the technology and who will be controlled? And ultimately, who will be harmed?

Third, embedded in every technology there are one or more powerful ideas—and biases. These ideas are often hidden and abstract—but they influence how people use their minds, in what it makes us do with our bodies, in how it codifies the world, in which of our senses it amplifies, in which of our emotional and intellectual tendencies it disregards. As McLuhan said, “The medium is the message.” Online learning “codifies” in certain ways—ways that connect learning via screens, a process of information transfer. What forms of understanding and knowing are being ignored or suppressed? If oral cultures valued memory and print cultures valued systematic organization, what forms of knowing does the online world create?

Fourth, technological change is not additive; it is ecological, which means, it changes everything. The consequences of technological change are always vast, often unpredictable and largely irreversible and is, therefore, too important to be left entirely in the hands of [any one person or group]. What is amazing as schools have responded to the COVID-19 crisis, is just how uniform the responses have been. Moving online, wherever in the world you may be, has meant jumping onto technologies such as Zoom, Blackboard, Google Classroom, or Microsoft Teams. Any pedagogical innovation that occurs is constrained by the design of these tools and not necessarily the pedagogical needs of teachers and educators. In taking these decisions under immense time-pressure, we are shifting, in not so subtle ways, the very ecology of the emerging educational ecosystem.

Fifth, technologies are often perceived as part of the natural order of things and therefore tends to control more of our lives than is good for us. Technologies are fictions, created by humans in specific political and historical contexts. There is nothing inherently normal about school as it existed pre-COVID-19. In fact, in can be argued that separating learning from our everyday life, building it around curricula developed by “experts,” breaking the day into 50-min periods around disciplines, and assessing students and school via standardized tests are all fundamentally historically contingent decisions that do not stand much scrutiny. Online learning, as it grows, can be many different things. It can continue to instantiate the worst aspect of face-to-face schooling or truly allow the emergence of new tools, technologies, and pedagogies.

There are a lot of questions that we need to ask ourselves as we move through this COVID-19 crisis, and these five issues raised by Postman are a good start. The point is not whether online learning is good or bad just as print culture was not better or worse than a culture based on orality. The advent of print is deeply connected to the renaissance, the enlightenment, and the scientific revolution. One could argue that schools are an invention of the printing press and the important role that the printed word has on our lives. And television allows us to be part of a global village, to
share and understand the world visually and powerfully and the Internet has just sped that along with the ability to communicate, engage with others across the globe in real time. It has also led to fake news, twitter bots, and a devaluation of expertise.

I hope that, as educators and as global citizens, we have the courage, grace, wisdom, and humility to make decisions (whether about online learning or anything else) with thoughtful compassion. As Harari (2020) writes:

When choosing between alternatives, we should ask ourselves not only how to overcome the immediate threat, but also what kind of world we will inhabit once the storm passes. Yes, the storm will pass, humankind will survive, most of us will still be alive—but we will inhabit a different world.

We need to ask difficult questions regarding business models and technology, the regulatory and policy environment, as well as the broader political and economic contexts within which they function. These are complex issues that go beyond merely going online or not. For now, let’s give Postman (1998) the last word:

...we have been willing to shape our lives to fit the requirements of technology, not the requirements of culture. This is a form of stupidity, especially in an age of vast technological change. We need to proceed with our eyes wide open so that we may use technology rather than be used by it.

Declaration of conflicting interests
The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding
The author(s) received no financial support for the research, authorship, and/or publication of this article.

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