How to Fool Yourself with Information Technology
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"Any sufficiently advanced technology is indistinguishable from magic."
---Arthur C. Clarke (1917-2008)

"In a few hundred years, when the history of our time will be written from a long-term perspective, it is likely that the most important event historians will see is not technology, not the Internet, not e-commerce. It is an unprecedented change in the human condition. For the first time—literally—substantial and rapidly growing numbers of people have choices. For the first time, they will have to manage themselves. And society is totally unprepared for it."
---Peter Drucker (1909-2005)

Preface

No doubt that a student's immediate academic and professional reality lies somewhere between the two extremes inferred by the quotes above. I, myself, have been a deep technologist from a very early age. What that probably means in management terms is that I am in a small way closer to understanding the profound limitations of various technologies in our learning environment—that is, the environment in which performance is almost always measured directly and individually (especially with respect to a final letter grade in a course).

The purpose of this document is to help students understand the limitations of information technology as those limitations relate to high-quality academic performance.

The "Attention" Economy

Business students are intimately familiar with the phrase "time is money." The academic equivalent of that phrase might be "attention is value." A critical task for a student is to manage and structure their attention. Information that is both rigorous and relevant is *signal*. Everything else is *noise*. For learning purposes, information should meet two broad tests. First, is the information rigorous—that is, is the information accurate, detailed, and actionable? Second, is the information relevant—that is, is the information aligned with overt objectives, such as helping you obtain good grades or other academic outcomes?

Clearly, you want a learning environment characterized by high signal and low noise. In prior decades, this might have meant "turn off the TV" or "turn off those video games." Today, this might mean "turn off YouTube/Facebook/Twitter" or "turn off 'texting'." Note that the modern choice is somewhat harder, chiefly because the technological device with which you have to make the choice is often the same one as you use to generate "performance" for academic deliverables, such as writing papers and library access. The "on/off switch" is more "hidden" and more "deceptive." However, the "switch" is no less important than it was in the past.

Further Study

Attention Deficit Trait: The Growing Workplace Problem [
http://www.drhallowell.com/wp-content/uploads/2015/04/IntroductionDriventoDistratwork.pdf
    ]

Davenport, T., and Beck, J. (2002), *The Attention Economy: Understanding the New Currency of Business*, Harvard Business Press, Boston:MA.

Zeldes, N. (2009), "Infoglut: It's the Disease of the New Millennium. How do we Treat It?*", IEEE Spectrum*, Oct.

Leveraging *Social* Networking for *Economic* Performance

Contemporary and popular Internet sites such as "Google Apps," "Facebook," "Flickr," and similar "social networking" sites encourage sharing many aspects of one's life. Some social networking sites, such as "LinkedIn" even promote the idea that much professional advancement (e.g., paid, tangible work) can result from an established "online network." The astounding technology of the Internet has enabled many such collaboration tools. In COBAE, for example, BUS 302 ("Gateway") leverages the strengths of teams in performing business-oriented work and is specifically designed to measure and manage this learning context.

But you don't have a "life-line" during exam time (or an annual evaluation time on the job). You have to figure out how to translate learning from your talented teammates into individual performance at some not-too-distant point. This is most likely because a class syllabus (or a job description) enumerates individual measures as the primary or sole evaluation rubric. Additionally, your social network may change (beyond your economic control). You can't excuse poor performance (on an exam or on the job) just because you have rationalized that your "powerful" social network is the source of your learning abilities. One good test is— does this social network contain an economic value proposition? Another good test is—will your social network (especially an online one) come to your rescue during a time of crisis?

Further Study

Deresiewicz, W. (2009), "Faux Friendship*", Chronicle of Higher Education*, Dec. 6,
    [http://chronicle.com/article/Faux-Friendship/49308/]

Stoll, C. (1996), *Silicon Snake Oil: Second Thoughts on the Information Highway*, Anchor.

Managing your Digital Rights Online

It may well be that the most difficult information technology challenge for individuals in the future will be managing one's digital rights (including privacy rights) online. It is possible that neither legal nor ethical understanding have advanced sufficiently enough to inform individuals of various risks and help individuals make adequate decisions. Nowhere on the Internet is this more of an issue than with "social networking" sites.

Further Study

Complaint to the Federal Trade Commission regarding Facebook's privacy settings. (2009, Dec.) [http://epic.org/privacy/inrefacebook/EPIC-FacebookComplaint.pdf]

Word Processors are very weak Writing Processors

Although it may seem counter-intuitive, the fastest computing hardware and the latest word processing software contribute relatively little to the production of high-quality, college-level academic writing. "A Writer's Reference" by Hacker (2007) is the most popular selling college textbook of all time. The following is a short list of writing issues that (according to Hacker) are not identified well (or at all), much less corrected for, by contemporary spelling and grammar checkers:

> Writing context and culture, appropriate style of discourse, degree of "assertiveness," faulty parallelism, misplaced and dangling modifiers, homonyms, missing words and omitted verbs, shifts in verb tense or mood, coordination and subordination, sentence variety and fragments, run-on sentences, common redundancies, unnecessary wordiness, jargon and abbreviations, clichés, sexist language, irregular verbs, pronoun agreements and references, missing or misused commas, semi-colons, apostrophes, hyphens, and quotation marks, capitalization, problems with emphasis

At least as of yet, no technology can substitute for the writing of the human student and the evaluation of the human instructor. Perhaps this situation will change in the long run.

Further Study

Hacker, D., and Sommers, N. (2018) *A Writer's Reference* (9th ed.), Bedford/St. Martin's, Boston:MA. ISBN-13 978-1319057442

"Right-size" your Technological Choices

A well-known business book in the early 1990's entitled "Business Process Reengineering" introduced the terms "upsize," "downsize," and "right-size." Many individuals have forgotten about the last term. Keep your technology, as Albert Einstein said, "…as simple as possible, but no simpler." While a "baseline" minimum of technology is useful to a motivated student, it is not clear that "advanced technology makes advanced students." Each decision regarding the use (or non-use) of a technology requires a conscientious, focused approach.

Additional Information

A good article related to the thesis of this document was written as an editorial to the Chronicle of Higher Education. See:

> http://www.chronicle.com/article/Welcome-Freshmen-Look-at-Me/237751