Learning in an information overload world

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To harness rather than drown in the ocean of knowledge that swamps us daily via the media and the Internet, we've got to become more cognitively productive, says Luc Beaudoin. The Simon Fraser University adjunct education professor drives home that message in his new book *Cognitive Productivity*.

Released on Leanpub, a Vancouver-based online bookstore, it's the first research-based book to explain how marrying learning strategies that underlie cognitive science with learner-friendly technology can make us more cognitively productive.

Drawing on concepts in cognitive science, an interdisciplinary field that encompasses linguistics, neuroscience, philosophy, psychology and artificial intelligence, Beaudoin defines cognitive productivity as our mind's ultimate goal. He explains how the artificial intelligence-like makeup of not just our brain, but also our mind, inspires that goal.

"The mind is like a sophisticated software program. It is engineered to cognitively process information, turning it into knowledge that we use to solve problems, develop marketable products or better our own lives," explains Beaudoin.

"If we, however, inundate it with information in varying formats, such as PDF files, audiobooks and Ted Talks, without meaningfully encoding and using it, then it will be quickly forgotten and the potential benefits of learning will be lost."

Enlightened by what his own varied career path has taught him about what fosters learning, Beaudoin cites examples of how information overload and learner-unfriendly technology are combining to break down our cognitive productivity.

"Merely skimming and archiving information, which most of us do to try to stay afloat on our sea of information, stymies cognitive productivity," says Beaudoin.

"There's not enough active reading, annotating and harvesting of information gems, which we must then practise recognizing and using if we're to become expert with the knowledge."

Referencing cognitive science-based learning strategies, Beaudoin demonstrates how conveying information in a synced knowledge-environment that incorporates learner-friendly technologies can enhance cognitive productivity.

Some examples of this he says are: "allowing users to annotate all content in the same way, whether it be ebooks, podcasts, web pages, audiobooks or videos, and enabling users to easily create productive practice challenges from any content they read."

Provided by Simon Fraser University