Willing or unwilling, we are all compelled to lifelong learning. It is thus unsurprising that an elective by Professor Robert Kamei (the founding Vice Dean at Duke-NUS Medical School and the author of *Strategic Learning*) on Learning to Learn Better is exceedingly popular at Singapore’s flagship university, the National University of Singapore (NUS). The course inspired Kamei to write this excellent and enjoyable book that at around 200 pages, is structured into ten chapters. The book also comes with appendices, a useful bibliography and numerous boxed quotes from Kamei’s students that showcase their experiences with studying. Laudably, it is complemented by a freely accessible website (strategiclearn.org). Although the intended audience for the book is predominantly university students and teachers, the book’s holistic and strategic approach to learning – and us all being compelled to lifelong learning in a knowledge economy – mean that it is useful for learners of all ages.

Kamei’s book dispels 12 commonly-held myths about learning and presents science-based facts about learning that are often counter-intuitive. Our perceptions of learning are frequently wrong. As learners, for instance, we need to be neither super-smart nor super-hard-working. We, however, need to be strategic in order to learn better. With the tremendous amount of things that we need to learn in a lifetime, being metacognitive (the ability to know how to learn) is a critically important competence. In fact, we should all become experts how we learn best, and the book helps us on this never-ending journey of self-discovery.

While the book’s author thankfully refuses to offer “a few simple, magical suggestions that will transform your study and make you a brilliant learner” (p. 9), he offers a Holistic Learning Framework that is developed throughout the book. The two key parts of the framework are (1) the Metacognitive Cycle and (2) its foundation of self-regulation and well-being. The Metacognitive Cycle is the “engine of any successful learning plan” (p. 35) and consists of an iterative process that involves setting study goals (both aspirational and SMART), planning, and implementing one’s study plans. The foundation of the Metacognitive Cycle is self-regulation and well-being (chapters 7 and 8).

Chapters 2 to 6 elaborate on planning aspects of the Metacognitive Cycle and discuss strategies to combat our being trapped in Ebbinghaus’s classic forgetting curve. They show how, when we for instance prepare for exams, we can slow the decay of forgetting and recall information better, rather than just recognising it. Various encoding strategies such as chunking (grouping content in a way logical to us), mnemonics (my favourite mnemonic example from the book is how to remember the six strings of a guitar EADGBE: Eat All Day Get Big Easy) and encoding specificity (i.e. studying in an environment similar to the location where it needs to be recalled) are exemplified. Amazingly, using such learning strategies can change our brain: “the anatomical part responsible in the brain, like a muscle, can grow in size” (p. 57). Knowledge is cumulative: the more we know, the more we learn. While having a good memory makes studying (and life in general) easier, it is comforting to know that Einstein apparently had trouble remembering his own phone number!

Kamei highlights the Goldilocks phenomenon that learning materials should be ‘desirably difficult’ or in other words, ‘just right’, i.e. neither too easy nor too hard. An increased effort to process information leads to a greater depth of processing and better recall. This is where the technique of interleaving similar topics leads to a flattening of Ebbinghaus’s forgetting curve and to a more durable memory. In addition, spaced learning is preferable to ‘blocked learning’ – popularly known as cramming or ‘brain dumps’ – as it helps us to reset the forgetting curve.

Memorisation is sometimes belittled in our era where we have a wealth of information at our fingertips as we can google things within seconds. Hence, it is useful that Kamei reminds us that in Bloom’s taxonomy (and its variants), memorising, while not necessarily implying understanding, is a vital building block for more complex forms of learning (such as understanding, applying, analysing, evaluating and creating).
Chapters 7 and 8 discuss the foundation of the Metacognitive Cycle as self-regulation and well-being. Self-regulation here refers to our ability to control our emotions and behaviours in order to reach our study goals, and it is closely related to self-discipline. Apart from highlighting the importance of understanding what motivates and demotivates ourselves, Kamei offers two powerful techniques for self-regulation: “if-then” statements and routines. Once I have completed the ‘if’ (the goal I have set – like writing on this book review for an hour), I get to do the ‘then’ (usually a treat, like reading the newspaper). Kamei also shares with his readers the impressive routines of famous high performers such as Twyla Tharp and Michael Jordan who had relentless practice routines that helped them become who they were. In addition to self-regulation and self-discipline, the remaining foundational pillars of the Holistic Learning Framework are health and wellbeing. Improving one’s sleep and health help focus while studying. As the right time allocation between studies, leisure and rest differs from one individual to another, it is important for us to figure out our right balance and that will enhance our learning.

After Kamei has gone through what are largely the planning aspects of his Holistic Learning Framework in his book’s first eight chapters, chapter 9 focuses on implementation and evaluation and reflection. While I was wondering whether so many chapters on planning in a ten-chapter book is overdoing things, former President Eisenhower’s quote convinced me otherwise: “I have always found that plans are useless, but planning is indispensable” (cited in p. 131).

In the Metacognitive Cycle, planning, implementation and evaluation are in a continuous loop. Evaluation consists of what Kamei cleverly calls the 3 Rs: Review, Reflect, and Revise. Amongst other things, chapter 9 also includes a useful discussion of study groups. While the bulk of the book focuses on students and how they can learn better (but we are all lifelong learners!), chapter 10 contains some great insights into teaching. Kamei is justifiably skeptical of the “classroom as a factory model… where all students learn the same thing, at the same space, at the same time, in the same way” (p. 138). However, he still sees a place for great insights into teaching. Kamei’s sincerity and humanity in undertaking great efforts to help his readers (and students) is obvious throughout.

Part of a reviewer’s job is to think critically. While Kamei is aware of socio-economic and cultural influences (such as societal attitudes towards education, poverty, or malnourishment) on students’ learning, he deliberately chose not to include them. It is good to remind ourselves that as well-educated professionals that live and work in high-income countries, we are very privileged. However, the bottom of the economic pyramid (about half of the global population) still has to go by on a handful of dollars a day, and often receives a rather questionable education, if at all. Although Critical Thinking is highlighted as a key 21st century skill, Kamei’s book could have been more critical in Brookfield’s sense of the word (Brookfield et al., 2019). Finally, when it comes to the Metacognitive Cycle, I wonder whether rather than a loop, a spiral (like a spiral staircase along the lines of Nonaka’s knowledge-creating spiral) may be an even more apt metaphor, as learning and knowledge are cumulative (see Nonaka & Takeuchi, 1995).

Kamei’s sincerity and humanity in undertaking great efforts to help his readers (and students) is obvious throughout. I found his self-deprecating humour refreshing and his humility touching. Whether or not Kamei’s “big goal” for his book “that it becomes a popular bestseller” (p. 27) will be achieved will also depend on his publisher’s marketing efforts. In his disarming, self-disclosing style, Kamei wrote: “I am indeed worried that no one will read it. Or, even worse, that there will be a long list of readers writing scathing reviews saying how bad the book is” (p. 129). I am absolutely certain that his concerns are entirely unwarranted, as I very much enjoyed this insightful and immensely practical book that I highly recommend.

Additional references

Brookfield, S. D., Rudolph, J., & Yeo, E. (2019). The power of critical thinking in learning and teaching. An interview with Professor Stephen D. Brookfield. Journal of Applied Learning and Teaching, 2(2), 76-90.

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