This is an introduction to what research has told us about how our brains work and how we can improve their operation in our daily lives. It is very well-written and convincing. The rules are: 1) exercise builds brainpower and this is the most important rule; 2) human brains evolved to the power of symbolic reasoning; 3) every brain is wired differently (e.g., information is stored in different ways in different places) depending on experience; 4) brains can attend to only one thing at a time and don’t pay attention to boring things; 5) repetition improves memory of an event, and so does reproducing the environment in which it was learned; 6) to improve long-term memory, incorporate new info gradually and repeat it at time intervals; 7) brain is in constant tension between sleep and staying awake, loss of sleep constraints reasoning and attention”; 8) stress constrains the brain’s abilities and worst kind is feeling no control; 9) we learn best when stimulating several senses at once; 10) vision is the dominant sense and we learn best through pictures; 11) men’s brains are different structurally and biochemically from women’s, respond differently to acute stress; 12) brain uses scientific approach (observation, hypothesis, experiment, conclusion) and we can create neurons and learn new things throughout our lives. Book can inform our approach to teaching. 3-27-10

Designed to present 49 techniques derived from master teachers to help K-12 teachers improve classroom management and teaching, this book offers tips for improving HE teaching, as well. Good overall advice includes: don’t confuse effort with mastery of content, mastery standards must be accompanied by specific assessment methods, have a learning objective for each class (that is manageable, measurable, guides all activity and is most important), maximize the participation ratio (amount of time students spend writing, thinking, analyzing, talking) in each class; practice five principles of classroom culture (discipline, management, control, influence, engagement (p. 146), five principles of effective classrooms (guide while introducing material, expand participation ratio, remediate error, stretch students, check for understanding236, build reading comprehension (chap 10). Other tips include showing a slide emphasizing the class’s objective as students enter the classroom, I/We/You progress (direct instruction/guided practice/independent practice), use “hooks”-short intro moment that captures material to be presented and engages student attention; break the “plane” separating the instructor from the students by moving among the students while you engage them, use exit tickets-summary questions at end of each class, use cold calls rather than asking for volunteers to answer (112-), writing about a topic in advance vastly improves learning (138-), always employ Strong Voice in the classroom (economy of language, no talking over, stick to one topic at a time, square up/stand still, use quiet tactically
(182), praise for working hard not for being smart, be warm and strict, normalize error. The book includes a DVD showing most of these techniques in action. 6-19-10

Author bursts the balloon that people like Mozart and Tiger Woods were born with special talent (i.e., a natural ability to do something far better than most people can). Rather, they excelled later in life (at least 10 to 15 years later) by “deliberate practice.” With human ability the scarcest resource businesses face, those helping people to become more effective at their jobs (including educators) need to recognize this process. Geneticists have not identified any “talent gene”. There is minimal correlation between IQ and achievement in the world (other than grades in school). Top achievers are rarely child prodigies. Nurture and the power of mentoring are much more important for producing geniuses or star athletes than conditions of birth. Deliberate practice: especially designed to improve performance, often with a teacher’s help; can be repeated often; requires continuous feedback on results (teachers again); mentally highly demanding; isn’t much fun (discomfort builds positive automatic behaviors). This deliberate but uncomfortable practice takes us around our critical limitations. Best performers in a specific field, and best performing companies, “recognize the importance of deep knowledge in their specific field, as opposed to general managerial ability” (p. 97). Such companies value “domain expertise” in managers – extensive knowledge in a field. Top performers can hang huge quantities of information on the domain expertise structure they build. Mentors – teachers – should serve as experienced masters who can advise on skills/abilities that should be acquired and provide feedback on progress. The author argues the case method is particularly effective in teaching how to manage more effectively. And he provides detailed advice on how to acquire domain knowledge by building mental models of how the domain functions as a system. He stresses the value of continuous professional development to top performers (coaching/mentoring, feedback), and extends these to teams seeking to be top performers and to those seeking improved innovation skills and creativity. While speed and general cognitive abilities decline with age, research shows that, with deliberate practice, domain knowledge does not.
6-23-10

Marshall McLuhan noted decades ago that “in the long run, a medium’s content matters less than the medium itself in influencing how we think and act” (p. 3) Carr noticed the internet “seemed to be chipping away at his capacity for contemplation and concentration.

Brain researchers have found that the brain is quite plastic, but as we re-wire our synapses (alter their chemical flows), we long to keep them activated. In worst cases, this explains depression and addictions. Over mankind’s history, language
changed our brains and so did writing (it heightens our consciousness - 57). “Deep reading” (“the reader becomes the book”-74) became possible as the codex replaced the scroll, spaces were placed between words, and syntactical rules were applied. Universities grew up, offering collections of books and stressing private reading to complement lectures. As printed books became commonplace, our ancestors followed a line of argument/narrative through a succession of pages and “became more contemplative, reflective and imaginative.

But as internet use grows, we spend less time reading print publications. But “combining many different kinds of information on a single screen, the Net further fragments content and disrupts our concentration (91). The online environment “promotes cursory reading, hurried and distracted thinking, and superficial learning” (116). Online reading cannot be deep reading, but descends to mere decoding of information. Moreover, all of the sensory stimuli of a web page add to cognitive load on our working memory, reducing our ability to build schemas and distinguish relevant from irrelevant information. Multitasking imposes switching costs from re-focusing our attention, adding further to cognitive load. Cornell researchers found that students listening to a classroom lecture while surfing the internet demonstrated far less recall of information presented than the group of students without laptops (130).

Growing use of the internet reduces viewers’ capacities for deep processing information required for “mindful knowledge acquisition, inductive analysis, critical thinking, imagination and reflection” (141). Deep processing is the consolidation of memories in the brain’s long-term memory, comprising what we call “intelligence” (192). In contrast, “The Web is the technology of forgetfulness” (193), reducing that intelligence. The ability to translate thoughts into cursive writing diminishes with the growth of tapping keys to produce symbols on screens. Another study found that as scholarly journals increasingly move online, scholars cite fewer articles in their own research than before, with a heavy skew toward more recent articles, “narrowing science and scholarship” (217). He has thoughtful comments about reading books, e-books, Google, and impacts of digital technologies on culture and our humanness. 7-17-10


The authors are responding to a crisis in graduate management education. Critics charged business schools were not preparing students for success in increasingly complex organizations. Rather, they are failing to engage students with overly analytic curricula. Companies are shifting hiring away from MBAs. The demand for part-time and executive MBA programs is replacing the full-time MBA demand. The authors conducted extensive interviews and profile 11 MBA programs in depth, focusing on what they are doing to change. They found that MBA programs have modeled themselves on the traditional academic disciplines and have become less relevant to practitioners. They identify 8 unmet needs: global perspective,
leadership skills, integration skills, effective implementation, creativity and innovation, critical thinking and effective communication, role and responsibility of business, understanding limits of models and markets (pp. 8-9). Although they note executives want business schools to pay more attention to ethical development of MBA students, none of these 8 specifically references such development. The authors emphasize that professional education need to focus on the “leadership framework = knowing + being + doing. Or Knowledge (facts, frameworks, theories), Values (commitments, attitudes, beliefs) and Skills (competencies, tools, techniques). In-depth reviews of the 11 MBA programs and reasons for change is quite illuminating. 8-3-10

6. Stanley Fish, Save the World on Your Own Time, 2008, 178 pp. Author is former Dean of University of Illinois College of Liberal Arts and Sciences and now Professor at Florida International University expanding the theme, do your own job, don’t do somebody else’s job and don’t let somebody else do your job. The task of the Dean or Instructor is to teach evaluation, not celebrate interests, beliefs or identities. This requires introducing students to bodies of knowledge and traditions of inquiry new to them and equipping these students with the analytical skills (e.g., argument, statistical modeling, laboratory procedure) to engage in independent research. Neither they nor the university should not advocate personal, political, moral or any other kind of views but academic views. Instructors should be introducing students to questions they did not know how to ask and providing them with the skills to answer them, at least provisionally. There are a “bewildering array” of belief systems an Instructor could teach: how to choose? Rather, our professional obligation is to teach assessment and evaluation so students can make informed choices among belief systems. “Academic freedom” is the freedom of academic to study anything they like, not indoctrinate students. While speaking from a liberal arts, public university, undergraduate perspective, Fish’s dictums are worth reflecting on as we Instructors decide what it is that we should teach graduate business students. 5/30/11

BOOKS TO AVOID

10-6-11