Journal of Effective Teaching in Higher Education

Range: Why Generalists Triumph in a Specialized World
By David Epstein, 2019. New York, NY: Penguin, 339 pages, ISBN 9780735214484, Hardcover, $16.89.
Reviewed by Laura M. Harrison, Ohio University, drlauramharrison@gmail.com

If you are a person who values the broad knowledge afforded by a liberal arts education, you have probably experienced the challenge of articulating its value to the many naysayers who eschew the liberal arts in favor of a more "practical" education. This is a problem with which I wrestled, too, using vague language like "critical thinking," "public good," and "engaged citizenship" to try to convince people that students should be exposed to a wide range of intellectual offerings. I generally floundered in these efforts; lofty concepts are no match for convincing selling points about the material benefits of specialized fields of study leading to specific jobs. I was stuck on this conundrum until I discovered David Epstein's *Range: Why Generalists Triumph in a Specialized World.*

Although *Range* does not belong to the long line of higher education scholarship dedicated to defending the liberal arts, Epstein succeeds in achieving this goal where many have faltered. Epstein models the thesis of his work by providing the outsider perspective needed to make actual progress on this age-old problem of communicating the value of a broad education. He begins in the world of sports, challenging the often-touted example of Tiger Woods' singularly obsessive focus on golf as the model for how to achieve great heights. Woods' approach is known as the "10,000 hour" rule: the idea that the way to develop mastery is to do the thing repeatedly for 10,000 hours. Those who ascribe to this technique necessarily believe in hyper-specialization; there is no time for other interests at this level of dedication. Anything outside the targeted skill is simply useless distraction from the task at hand.

Epstein acknowledges that this strategy worked for Woods but positions him as the exception rather than the rule. He uses Roger Federer as a contrast with Tiger Woods, showing how Federer became a tennis star not *in spite of* his lack of an early, singular commitment to the sport but *because of* the wide interests that led him to play creatively. Epstein's advocacy of broader interests seems counter-intuitive given the dominant narratives about brilliance being driven by singular obsession. Epstein exposes a hidden variable in these stories: they tend to be about skills like chess with orderly rules and predictable patterns. When we only train for immediate, short-term results in artificial contexts, we produce students who do well on tests, but cannot apply the knowledge in what psychologist Robin Hogarth called the "wicked environment" of the real world. As Epstein explains, the world we actually live in is chaotic, demanding "conceptual reasoning skills that can connect new ideas and work across contexts" (p. 53).

The implications of Epstein's central argument about the importance of range are significant for education, particularly in this current moment of life in a world

DOI: https://doi.org/10.36021/jethe.v4i1.202

shaken up by Covid-19. The old arguments about the liberal arts being nice but impractical in the real world are weaker now that COVID-19 has upended much of what we thought we knew about the real world. The "wicked environment" created by the pandemic demands not a singular focus on one skill but the ability to make the intellectual connections necessary to adapt to changing conditions. Epstein describes this process as follows:

> That is, the more contexts in which something is learned, the more the learner creates abstract models, and the less they rely on any particular example. Learners become better at applying their knowledge to a situation they've never seen before, which is the essence of creativity. (p. 77)

The seemingly safe route of the hyperspecialized course of study is less stable in a world characterized by the kind of upheaval caused by pandemics (and climate change, political unrest, and other disrupters). Epstein goes on to identify an equally significant disrupter that makes range necessary: the proliferation of artificial intelligence (AI), a competitor that is impossible for humans to beat on measures of short-term repetitive tasks.

Much has been written about computers beating chess, video game, Jeopardy!, and other kinds of champions, often in the spirit of great concern about humans' employability in an increasingly technology-driven world. Epstein expands these stories by describing the arenas in which AI fails to win against humans, that is, activities requiring more long-term adaptive strategies. Based on plentiful research and examples, he concludes, "The more constrained and repetitive a challenge, the more likely it will be automated, while great rewards will accrue to those who can take conceptual knowledge from one problem or domain and apply it in an entirely new one" (p. 53).

Epstein therefore advocates for educational experiences that inculcate this kind of conceptual knowledge. Unfortunately, many schools at both the K-12 and higher education levels seem to be stuck in the mindset of narrow learning for short-term performance on tests. This is not difficult to see in K-12 schools often driven by high stakes testing but may be less obvious in higher education. The recent focus on learning outcomes, however, should give us pause in light of Epstein's argument. He refers to "an enormous and too often ignored body of work demonstrating that learning itself is best done slowly to accumulate lasting knowledge, even when that means performing poorly on tests of immediate progress" (p. 11). Privileging subjects easy to measure on standardized tests is therefore a losing strategy in the wicked environment of the real world. Epstein does not propose the wholesale eradication of standardized tests or learning outcomes. Instead, he offers his critique in the spirit of balance in education systems that too often put the proverbial cart before the horse when it comes to student learning and assessment. Muller (2019) makes a similar argument in his aptly named work, *The Tyranny of Metrics*, advocating for right-sized assessment measures that enhance rather than compete with a meaningful education.

One drawback of the book for a higher education audience is that it is short on policy and practice recommendations for addressing the issues it raises. This is to be expected given that the book was written for a more general audience. The good news is that readers can extrapolate some recommendations for themselves, particularly with regard to curriculum development. Epstein provides excellent talking points for why the kinds of broad knowledge instilled by the liberal arts are indeed practical for the world in which we now live.

The current moment requires the ability to imagine different possibilities in a world characterized by disruption. My liberal arts professors helped me prepare for disruption in life by teaching me how to imagine different ways of being through reading and writing. Invoking Keats, Mark Edmundson explains this process as breaking free from one's habitual self:

> Habitual self is good for a grocery list, a laundry list, a note to the mechanic, or a note of thanks for the spotted birthday tie or the fruit-scented candle…I think sitting down to write is about getting loose from the habitual self. If you're going to tap into what's most creative inside you, you've got to find a way to outwit the pressures of the ordinary. (p. 141)

Having a mind capable of reimagining life beyond the habitual self will likely prove increasingly valuable in a world with more ambiguities. If students continue to think that the best recipe for success is the "safe" major leading to a similarly named career, they may be sorely mistaken. In my doctoral courses on organizational change, professors likened the situation to being a horseshoe maker right before the car was invented. A person could be the most competent and efficient horseshoe maker in the world, but buckling down and making more horseshoes would not be enough to adapt successfully to the changing conditions brought about by the invention of the car. Epstein does not advocate overcorrections like abandoning vocational and/or professional courses of study; he calls for greater interdisciplinarity so that all students gain a broader knowledge base regardless of major. Our students—whatever their field of study—need new vocabularies, new languages that will help them navigate the radically changed world in which we find ourselves.

References

Edmundson, M. (2018). *The heart of the humanities: Reading, writing, teaching.* Bloomsbury, USA.

Muller, J. (2019). *The tyranny of metrics.* Princeton University Press.