

7 Must-Read Books On Education

by Maria Popova

What the free speech movement of the 1960s has to do with digital learning and The Beatles.

Education is something we're deeply passionate about, but the fact remains that today's dominant formal education model is a broken system based on antiquated paradigms. While much has been said and written about education reform over the past couple of years, the issue and the public discourse around it are hardly new phenomena. Today, we round up the most compelling and visionary reading on reinventing education from the past century.

ISAAC ASIMOV: THE ROVING MIND

Earlier this year, we featured a fantastic Bill Moyers archival interview with Isaac Asimov, in which the iconic author and futurist echoes some of his own beliefs in the power of curiosity-driven, self-directed learning and the need to implement creativity in education from the onset. These insights, and more, are eloquently captured in *The Roving Mind* — a compelling collection of 62 edifying essays on everything from creationism to censorship to the philosophy of science, in which Asimov predicts with astounding accuracy not only the technological developments of the future but also the complex public debates they have sparked, from cloning to stem-cell research. While intended to encourage young people to pursue a career in science, the book is both a homage to the inquisitive mind and a living manifesto for freedom of thought across all disciplines as the backbone of education and creativity.

"Once we have computer outlets in every home, each of them hooked up to enormous libraries where anyone can ask any question and be given answers, be given reference materials, be something you're interested in knowing, from an early age, however silly it might seem to someone else... that's what YOU are interested in, and you can ask, and you can find out, and you can do it in your own home, at your own speed, in your own direction, in your own time... Then, everyone would enjoy learning. Nowadays, what people call learning is forced on you, and everyone is forced to learn the same thing on the same day at the same speed in class, and everyone is different." ~ Isaac Asimov

SIR KEN ROBINSON: THE ELEMENT

Sir Ken Robinson's blockbuster TED talks have become modern cerebral folklore, and for good reason — his insights on education and creativity, neatly delivered in punchy, soundbite-ready packages, are today's loudest, most succinct rally cry for a much-needed revolution. That's precisely what he does in *The Element: How Finding Your Passion*

Changes Everything — a passionate celebration for the wide spectrum of human ability and creativity, which current educational models consistently limit and try to fit into predetermined boxes, extricating rather than encouraging young people's unique abilities and talents. From Paul McCartney to Paulo Coelho to Vidal Sassoon, Robinson demonstrates the power of properly harnessing innate creativity through fascinating case studies and personal stories, and offers a powerful vision for bringing this respect for natural talent to the world of education.

We have a system of education that is modeled on the interest of industrialism and in the image of it. School are still pretty much organized on factory lines — ringing bells, separate facilities, specialized into separate subjects. We still educate children by batches. Why do we do that?"

For an excellent complement to *The Element*, we highly recommend Robinson's prior book, *Out of Our Minds: Learning to be Creative* — re-released last month, it offers a thoughtful and provocative analysis of the disconnect between the kinds of "intelligence" measured and encouraged in schools and the kinds of creativity most essential to our society moving forward.

A NEW CULTURE OF LEARNING

In *A New Culture of Learning: Cultivating the Imagination for a World of Constant Change*, Douglas Thomas and John Seely Brown approach education with equal parts insight, imagination and optimism to deliver a refreshing vision for the relationship between education and technology, where the two progress synchronously and fluidly — a vision that falls somewhere between Sir Ken Robinson's call for creativity in education paradigms and Clay Shirky's notion of "cognitive surplus." The book touches on a number of critical issues in digital learning, from the role of remix culture to the importance of tinkering and experimentation in creating, not merely acquiring, knowledge. Central to its premise is the idea that play is critical to understanding learning — a notion we stand strongly behind.

We're stuck in a mode where we're using old systems of understanding learning to try to understand these new forms, and part of the disjoint means that we're missing some really important and valuable data." ~ Douglas Thomas

Our full review [here](#).

CLARK KERR: THE USES OF THE UNIVERSITY

To understand where formal education is going, we must first understand where it came from and what role it served in the cultural context of society. Clark Kerr's *The Uses of the University: Fifth Edition*, originally published in 1963 and based on his Godkin Lectures at Harvard, is arguably the most important work on the purpose of educational institutions ever published. Kerr, an economist with a historian's sensibility, coins the term "multiversity" at the dawn of the free speech movement of the 60s and examines the role of the university as a living organism of sociopolitical thought and activity. The book, as

US Berkley's Hanna Halborn Gray eloquently puts it, "describes the illnesses to which this organism might be prone, together with diagnoses and prognoses that might prove useful."

What the railroads did for the second half of the last century and the automobile for the first half of this century may be done for the second half of this century by the knowledge industry: And that is, to serve as the focal point for national growth." ~ Clark Kerr

ANYA KAMENETZ: DIYU

As big proponents of self-directed learning — the empowering pursuit of knowledge flowing organically from one's innate curiosity and intellectual hunger — we're all over Anya Kamenetz's *DIY U: Edupunks, Edupreneurs and the Coming Transformation of Higher Education* — an ambitious, albeit slightly alarmist, look at the American higher education system and the flawed economic models at its foundation. Passionately argued and rigorously researched, the book exposes the greatest challenges to education reform and offers a glimmer of hope for new, more open and accessible models of education that transcend the institutional "credential mill" of traditional academia.

The promise of free or marginal-cost open-source content, techno-hybridization, unbundling of educational functions, and learner-centered educational experiences and paths is too powerful to ignore. These changes are inevitable. They are happening now. [...] However, these changes will not automatically become pervasive." ~ Anya Kamenetz

KARL WEBER: WAITING FOR SUPERMAN

Waiting for "SUPERMAN": How We Can Save America's Failing Public Schools is the companion text to the excellent documentary of the same name, which we featured last year. It explores the human side of education statistics, following five exceptionally talented kids through a system that inhibits rather than inspires academic and intellectual growth. Unlike other fault-finders who fail to propose solutions, the narrative both mercilessly calls out a system full of "academic sinkholes" and "drop-out factories," and reminds us of the transformational power that great educators have to usher in true education reform. More than a mere observational argument, the book offers a blueprint for civic engagement with specific ways for parents, students, educators and businesspeople to get involved in driving the movement for quality education, including more than 30 pages' worth of websites and organizations working towards this shared aspiration.

In America right now, a kid drops out of high school every 26 seconds. These drop-outs are 8 times more likely to go to prison, 50% less likely to vote, more likely to need social welfare assistance, not eligible for 90% of jobs, are being paid 40 cents to the dollar of earned by a college graduate, and continuing the cycle of poverty."

HOWARD GARDNER: FIVE MINDS FOR THE FUTURE

Sociologist Howard Gardner, one of our all-time favorite nonfiction authors, is best-known as the father of the theory of multiple intelligences — a radical rethinking of human intellectual and creative ability, arguing that traditional psychometrics like IQ tests or the SAT fail to measure the full scope and diversity of intelligence. In *Five Minds for the Future*, Gardner's highly anticipated follow-up published more than two decades later, the author presents a visionary and thought-provoking blueprint for mental abilities that will be most critical in the 21st century as we grapple with issues of information overload and creative entrepreneurship. Perhaps most notable, however, is Gardner's insistence that the five minds he identifies — disciplined, synthesizing, creating, respectful and ethical — aren't genetically encoded givens but, rather, abilities we actively develop and cultivate with time, thought and effort.

The synthesizing mind takes information from disparate sources, understands and evaluates that information objectively, and puts it together in ways that make sense to the synthesizer and also to other persons. Valuable in the past, the capacity to synthesize becomes ever more crucial as information continues to mount at dizzying rates." ~ Howard Gardner