theories and methodologies

Education for the Future

KAREN THORNBER

CATHY N. DAVIDSON'S *THE NEW EDUCATION: HOW TO REVOLUTIONIZE THE UNIVERSITY TO PREPARE STUDENTS FOR A WORLD IN FLUX* JOINS A rapidly growing genre that calls on society and its leaders to revolutionize education at all levels to prepare children and young adults for a fast-changing world. This genre includes the former Harvard University president Derek Bok's *The Struggle to Reform Our Colleges* (2017) and the Northeastern University president Joseph E. Aoun's *Robot-Proof: Higher Education in the Age of Artificial Intelligence* (2017). But whereas Bok focuses on why so little has changed in education despite the pressing need for radical transformation and Aoun introduces the new discipline of "humanics" as a means for higher education to prepare students for an era when professions are rapidly disappearing, Davidson highlights the widening gap between a rapidly changing society and an educational system that has not kept pace. Davidson supports her theoretical arguments with case studies of programs from institutions that are paving the way for a new education.

Davidson makes clear the inadequacy of current practices and the necessity of taking action, declaring in the introduction: "Those of us who are old enough to recognize that we are living in new ways, as if on a new planet, must take responsibility and begin to think seriously about how to remake the university to equip students to thrive in this murky and often polluted new atmosphere that we now all breathe . . . we're still going to school the way we did in 1993, which is to say, pretty much as we did in 1893" (6).[1] Ours is not the first era burdened with an educational system that no longer meets the needs of society. And Charles Eliot's success in transforming some of the United States' most established and prestigious universities should instill confidence that radical change is possible. As the president of Harvard from 1869 to 1909, Eliot restructured the university into new fields, disciplines, and requirements, even as he declared that the education offered at the "girls' Harvard" (i.e., Radcliffe College) was to "fit [women] to make family life and social

KAREN THORNBER is professor of comparative literature and of East Asian languages and civilizations at Harvard University, where she is also Victor and William Fung Director of the Harvard University Asia Center. She is the author of two monographs (*Empire of Texts in Motion* [Harvard UP, 2009] and *Ecoambiguity* [U of Michigan P, 2012], each the recipient of several international prizes), a prize-winning translator of a Japanese poetry anthology, and the coeditor of many books and special issues of academic journals. Her more than six dozen book chapters and journal articles focus on comparative and world literature, literatures and cultures of East Asia and the Indian Ocean Rim, diaspora, gender, empire and postcolonialism, trauma, the environmental humanities, and the medical and health humanities.

© 2018 KAREN THORNBER
PMLA 133.3 (2018), published by the Modern Language Association of America

https://doi.org/10.1632/pmla.2018.133.3.700 Published online by Cambridge University Press

life more intelligent, more enjoyable, happier, and more productive" (Malkiel 36). We too, argues Davidson, must now revolutionize our thinking, given that "very little in the higher education process of today prepares us for managing the integrated, merged, and chaotic work and home lives most of us are now experiencing." More specifically, "ours is not the world for which Eliot and his colleagues created majors, minors, graduate schools, and professional schools." Sounding the alarm, Davidson writes that many of the professions for which students now train, often intensively and for years, "no longer exist in a way that makes sense" (44). For Davidson, this claim encompasses everything from medicine, law, and academia to accounting, journalism, and computer programming.

Davidson identifies the tasks ahead as redesigning higher education "for the intellectual space travel students need to thrive in the world we live in now" (6); reorienting current educational paradigms that overly standardize, test, diagnose, specialize, and discipline students "in one-way-transmission models inspired by the hierarchy of the factory and the assembly line, not the interactive Internet"; and really educating students who must "contend with, be prepared for, and find a way to prosper among [the] vast changes" of the past generation (7). Like many others, Davidson argues that today's students "need so-called soft skills, including strategies, methods, and tactics for successful communication and collaboration," identifying these skills as necessary for navigating a world in flux where nearly every job, profession, and field that now exists has an uncertain future. Students also need "new ways of integrating knowledge, including through reflection on why and what they are learning." This means doing away with "teaching to the test" and instead embracing "active learning," in which students are expected to create new knowledge from the information that is now so readily at hand and with this new knowledge contribute publicly, professionally, and experientially beyond the classroom. In other words, students not only need to master set bodies of information and knowledge that their teachers and other experts have determined are important to specific disciplines and fields. They also need to learn "how to become experts themselves," given that doing so is "a survival skill for the journey that is their lives" (8).

Not surprisingly, considering its objectives, the revolution that Davidson envisions involves classrooms, curricula, and assessment systems alike. For colleges and universities this means shifting the goal for students from fulfilling course requirements to learning for success in the world after graduation and in particular to developing the skills to become "independent and demanding researchers who can use an array of creative, critical, and computational methods to solve problems, wherever they face them" (14–15). Davidson cautions that education should not be about preparing students for a specific workforce, given that current configurations are constantly being reimagined, but instead must be focused on readying students for the world, a task our colleges and universities fall remarkably short of accomplishing.

Preparing students for the world will require colleges and universities to radically change how they are organized, because at present they are ill-equipped to meet the needs of the twenty-first century. Davidson argues that we must move "beyond the inherited disciplines, departments, and silos by redefining the traditional boundaries of knowledge and providing an array of intellectual forums, experiences, programs, and projects that push students to use a variety of methods to discover comprehensive and original answers" (13). To be sure, many colleges and universities already feature flexible, interdisciplinary programs that equip students with the skills needed not just to succeed in the world but also to effectively tackle urgent issues of global concern. It is in these

https://doi.org/10.1632/pmla.2018.133.3.700 Published online by Cambridge University Press

institutes, initiatives, centers, and interdisciplinary groups where, Davidson argues, the "real action" of most colleges and universities is taking place (13). But these initiatives generally exist outside or across departments and disciplines, rarely have designated faculty lines, and are often plagued by unpredictable funding. Given their vulnerability, most have had limited impact.

Technophobia—a fear of change as embodied by new technology—has no place in the new education. Davidson decries the tendency of educators to ban from the classroom devices that are ubiquitous, or nearly so, almost everywhere else, and she dismisses studies that "prove" that laptops, tablets, and mobile phones impede student learning. Perhaps, as some have suggested, taking notes longhand is "better" than taking notes on a laptop (i.e., it promotes more extensive retention and deeper understanding), but Davidson argues that instead of banning electronic devices it would be more appropriate to teach students how best to use them. Even more important, if during class students are turning to their phones and laptops out of boredom, has the time not come to develop more active, creative ways of teaching that put computing power to good pedagogical use? Since the primary purpose of formal education is to prepare students for life after graduation, it is counterproductive, Davidson says, to forbid in the classroom the kind of learning that they will experience outside the classroom. Instead, the classroom can be a place where students become more Web literate, a place "to do that which no screen can do—including offering students the opportunity to understand, create with, and critique all that is going on in the background of our screens" (91).

Just as important is changing how we evaluate our students. Davidson points to the backwardness of requiring students to write papers for the sake of writing papers. Traditional assessment methods no longer make sense for a generation that "wants to know what is important and wants to communicate [to the world, not just to their professor,] what they know" (94). Instead, as some professors have done (here Davidson gives the example of Juana María Rodríguez, a professor at the University of California, Berkeley), a more effective approach would be to have students use the results of their research to increase the rigor of extant *Wikipedia* articles and post new ones when necessary.

Potentially just as damaging as technophobia is technophilia. Davidson gives the example of MOOCs (massive open online courses). Some people are avid and uncritical supporters of this type of education, including the best-selling author and *New York Times* columnist Thomas L. Friedman, who believes that "nothing has more potential to lift people out of poverty" (qtd. in Davidson 101). Davidson disagrees, dubbing Friedman's comment "technophilia at its worst." As she rightly points out, MOOCs' pedagogical model of having experts pontificate and awarding certificates for successful test taking is archaic and almost offensive. Davidson argues that "[v]ideos of famous professors who formerly taught at elite universities will not 'transform' higher education except perhaps in an unfortunate way, reinforcing and spreading the nineteenth century passive, hierarchical models of teaching and learning" (103). Transforming higher education requires finding a way "between the twin pitfalls of technophobia and technophilia" (131–32) so that we all can "wisely navigate our technology-obsessed era and prepare our students to do the same" (132).

What does this mean for the study of the humanities, and of literature? Davidson concedes that STEM is a central part of the new education, but she makes clear that STEM alone is not the solution. Research has repeatedly demonstrated that expertise in science, technology, engineering, and mathematics without grounding in interpretive and critical-thinking skills might facilitate students' search for their first job after col-

https://doi.org/10.1632/pmla.2018.133.3.700 Published online by Cambridge University Press

lege graduation, but a lack of those skills will hamper their future opportunities for career development and promotion. Even more important, science, social science, the humanities, and the arts together are required to train the next generation of students to have what the Arizona State University professor Sha Xin Wei has termed "palpable impact" (qtd. in Davidson 142). The ability to address complex, real-world questions such as "What will life be like in Phoenix when there is no water?" requires original and creative thinking, not narrow specialization. As Davidson summarizes, the new education is more than a change in curriculum and the implementation of a new kind of pedagogy. It is these phenomena "undergirded by a new epistemology, a theory of knowledge that is deep, synthetic, active, and meaningful, with real impact in the world . . . that empowers our students with better ways to live and thrive in a complicated world" (161).

Particularly relevant to scholars of literature is Davidson's discussion of Duke University's Bass Connections program, which replaces general education requirements with "a coherent focus on a complex problem that spans five broad thematic areas: brain and society; information, society, and culture; global health; education and human development; and energy" (154). Students choosing to focus on disparities in global health, for instance, would, not surprisingly, take classes in both classical and behavioral economics as well as in science, business, and management. But they would also study literature that addresses disease on a large scale, such as Boccaccio's *Decameron* (c. 1350), Daniel Defoe's *Journal of the Plague Year* (1655), Albert Camus's *The Plague* (1947), Chinua Achebe's *Things Fall Apart* (1958), and Gabriel García Márquez's *Love in the Time of Cholera* (1985). These books would help students gain a deeper appreciation of how cultural factors impact understandings of contagion and contamination, and students would obtain a broader perspective on the realities of global health challenges. Instead of taking a random selection of courses to fulfill their general education requirement, students would choose a program of study that would more directly prepare them for a wide variety of future careers. Ideally, students would also spend time abroad as part of this program, allowing them, in the words of Sam Sadler, a Bass program alumna and Duke graduate, to "engage with communities other than [their] own on an empathetic level rather than from [an] inherently sheltered standpoint."[2]

The program of study Davidson describes for a student interested in global health disparities resembles the burgeoning fields of the medical and health humanities, fields that, just like the environmental humanities, do not simply combine conventional disciplines but, embracing many of the ideals that Davidson promotes, create new forms of knowledge that help us grapple with some of the world's greatest challenges, including reducing the suffering caused by diseases and other adverse health conditions and understanding the social responses to these conditions.

To be sure, improvements in human health have been monumental over the last century, and the media report almost daily on new or impending medical miracles. Yet serious problems persist. In 2010 alone, 15 million people died from infectious diseases; the World Health Organization (WHO) estimates that by 2050, more than 10 million people will continue to die annually, primarily in low-income countries and communities, from respiratory illnesses, diarrheal diseases, HIV/AIDS, tuberculosis, malaria, meningitis, and other infectious conditions for which there are effective medical treatments if not cures (Dye). More than half of the nearly 6 million children under the age of five who died in 2015 succumbed to diseases that could have been prevented or treated with simple, inexpensive interventions; children in sub-Saharan Africa

https://doi.org/10.1632/pmla.2018.133.3.700 Published online by Cambridge University Press

are fourteen times more likely than their counterparts in more developed parts of the world to die before that age ("Children"). According to the WHO, an influenza pandemic remains a distinct possibility despite increased availability of flu vaccines; global vulnerability to biological attacks, including those using the smallpox virus, is only increasing along with advances in genetic engineering (Schlein; Osterholm and Olshaker).

Chronic noncommunicable diseases such as asthma, cancer, chronic obstructive pulmonary disease, diabetes, heart disease, inflammatory bowel disease, and rheumatoid disease are on the rise around the world, exacerbated by high-risk behaviors, biological factors, and social and structural causes such as poverty, unemployment, and racism (Ansell 34). Even though noncommunicable diseases now account for two-thirds of the deaths in low- and middle-income countries, only one percent of foreign health-care aid is earmarked for the prevention of those diseases (Bruni). In high-income countries as well, the prevalence of both communicable and noncommunicable diseases is closely tied to poverty and income inequality. The global economic impact of dental diseases exceeds $440 billion annually (Listl et al.). Mental disorders affect hundreds of millions of people around the world and are linked to potentially fatal conditions such as cancer, cardiovascular disease, diabetes, HIV/AIDS, and obesity (Mnookin). Even so, in high-income countries thirty-five to fifty percent of people with mental illnesses receive no medical care, while in low- and middle-income countries the figure rises to seventy-six to eighty-five percent if not higher. Climate change and extreme weather events are likely to increase the prevalence and severity of disease globally (Institute of Medicine). And, in the next three decades—as the world's population ages more rapidly than at any other time in human history—cases of dementia, which includes Alzheimer's disease, are expected to triple, from 35 million today to 115 million in 2050; by the mid-twenty-first century, seventy percent of persons with dementia are likely to be living in developing countries where access to resources is even scarcer than it is in wealthier counterparts (Scommegna).

These and other adverse health conditions cause considerable suffering. But people suffer not only from the physical processes of diseases themselves. Their suffering is exacerbated by how they are treated by society, medical professionals, and even those closest to them. Instead of being integrated into communities of care where they are treated in ways that promote healing and enable well-being even when cures remain out of reach, people with diseases and other adverse health conditions—and particularly those already marginalized because of their age, class, ethnicity, gender, race, religion, sexuality, or other factors—are all too frequently further stigmatized, dehumanized, and silenced. This degrading treatment regularly impedes healing and prevents well-being, even after a person has been cured. It likewise can increase the severity and prevalence of disease locally, regionally, and globally. Destructive attitudes, beliefs, behaviors, policies, and social structures almost guarantee that in some communities families and close friends of people with serious health problems will also be subjected to needless suffering. Without question, alleviating the suffering associated with adverse health conditions involves not only developing new medical treatments (e.g., pharmaceuticals, technologies, surgical procedures) and instituting new forms of interpersonal treatment in the medical setting (e.g., developing new ways for health professionals of all ranks to speak to patients). It also requires fundamentally changing how people treat themselves, one another, and the planet, everything from how they interact with their loved ones and strangers alike to the types of leaders and policies they support and for whom and what they advocate.

https://doi.org/10.1632/pmla.2018.133.3.700 Published online by Cambridge University Press

Healing suffering and enabling well-being are the primary goals of medicine, social medicine, and public health and of the medical and, more recently, health humanities. These fields have repeatedly demonstrated that prevention, control, relief, and healing are obstructed by physical, social, medical, and economic environments that are inimical to human and nonhuman health, environments with substantial barriers to developing and implementing policies and practices that promote healing and enable well-being (see Dye; "Frequently Asked Questions"). Yet transformations in treatment have been slow to materialize. This stems in part from the difficulty of determining precisely what policies and imperatives would effectively reduce suffering and from the refusal of those in positions of power and privilege to alter current patterns in meaningful ways.[3]

Another key and related obstacle to building communities of care, one made glaringly apparent by recent health-care debates in the United States, has been a widespread failure to recognize the urgency of transforming treatment of those affected by disease; many people do not appreciate the extent of the suffering current behaviors inflict on individual lives, families, and close social groups, as well as on the larger human and nonhuman communities in which we all are embedded. Programs such as Bass Connections offer students a way to grasp this urgency. And the place of literature in such initiatives is no accident. Literature—understood in this context as everything from creative nonfiction, essays, literary journalism, and memoirs and other forms of life writing to novels, novellas, plays, poems, short stories, and similar genres by (former) patients, their loved ones, health professionals, concerned members of society, and other writers of all sorts, from those little-known beyond their own communities to those who are renowned around the world—has been one of the loudest and most persistent voices in revealing the urgency and the possibilities of transforming treatment and creating communities of care. Works of literature highlight just how much of the suffering that accompanies adverse health conditions is caused directly and indirectly by social responses to these conditions. Even more important, works of literature vividly depict the intensity of this suffering. Literature's ability to focus on individual anguish amid larger crises has made it uniquely positioned to reveal the deeply penetrating damage caused by current practices and the pressing need to transform how society prepares for and works to ameliorate crises in health. And literature's capacity to expose the gratuitous suffering people inflict on those already dealing with the physical processes of diseases has the potential to motivate students not only to demand change but also to dedicate themselves to working more effectively and persistently to effect healing and well-being.

Davidson concludes the body of *The New Education* with a reminder of the urgency of transforming education:

> We can't just leave it for our most industrious students to find the most innovative programs and courses. We need to lead and support change. We need to revolutionize our universities, vigorously support them as a public good, and redesign them so that they are also good for the public. The new education must prepare our students to thrive in a world of flux, to be ready no matter what comes next. It must empower them to be leaders of innovation and to be able not only to adapt to a changing world but also to change the world. (254–55)

Transformation is urgent, but, as *The New Education* makes clear, it is also well within the realm of the possible. The changes for which Davidson and others have called are already underway in many academic fields and at many institutions, but as Davidson and so many others have recently argued, these changes are not yet nearly as extensive as they

https://doi.org/10.1632/pmla.2018.133.3.700 Published online by Cambridge University Press

need to be to prepare the next generations for the world into which they are graduating.

Notes

1. This is of course an overstatement and overlooks the move to coeducation, which was especially contentious at the world's most elite institutions in the 1960s and 1970s. See, for instance, Malkiel.

2. Sadler describes her experiences with a Bass Connections team in Kampala, Uganda. Halfway through the project she contracted sepsis, a life-threatening illness. She received urgent care at the International Hospital of Kampala, a top private hospital that saved her life but that also was far removed from the much more basic facility in which she and her team had been working, a facility in which she likely would have died. Sadler speaks passionately of her changed awareness of the stark reality of health disparities.

3. The remarks of Kelly et al. concerning reducing health inequities are also relevant to reducing the suffering surrounding adverse health conditions (11).

Works Cited

Ansell, David A. *The Death Gap: How Inequality Kills*. U of Chicago P, 2017.

Bruni, Frank. "How We Really Die." *The New York Times*, 31 May 2017, p. A21.

"Children: Reducing Mortality." *World Health Organization*, 31 Oct. 2017, www.who.int/mediacentre/factsheets/fs178/en/.

Davidson, Cathy N. *The New Education: How to Revolutionize the University to Prepare Students for a World in Flux*. Basic Books, 2017.

Dye, Christopher. "After 2015: Infectious Diseases in a New Era of Health and Development." *Philosophical Transactions of the Royal Society B*, 12 May 2014, doi:10.1098/rstb.2013.0426.

"Frequently Asked Questions." *NCHHSTP Social Determinants of Health*, Centers for Disease Control and Prevention, 21 Mar. 2014, www.cdc.gov/nchhstp/socialdeterminants/faq.html.

Institute of Medicine. *Global Climate Change and Extreme Weather Events: Understanding the Contributions to Infectious Disease Emergence: Workshop Summary*. National Academies Press, 2008.

Kelly, Michael P., et al. *The Social Determinants of Health: Developing an Evidence Base for Political Action*. *World Health Organization*, Oct. 2007, www.who.int/social_determinants/resources/mekn_final_report_102007.pdf.

Listl, Stephan, et al. "Global Economic Impact of Dental Diseases." *Journal of Dental Research*, 28 Aug. 2015, doi:10.1177/0022034515602879.

Malkiel, Nancy Weiss. *"Keep the Damned Women Out": The Struggle for Coeducation*. Princeton UP, 2016.

Mnookin, Seth. "Out of the Shadows: Making Mental Health a Global Development Priority." *The World Bank*, documents.worldbank.org/curated/en/270131468187759113/pdf/105052-WP-PUBLIC-wb-background-paper.pdf.

Osterholm, Michael, and Mark Olshaker. *Deadliest Enemy: Our War against Killer Germs*. Little, Brown, 2017.

Sadler, Sam. "Urgent Care: When the Researcher Becomes the Patient." *Duke University*, 19 Dec. 2017, bassconnections.duke.edu/about/news/urgent-care-when-researcher-becomes-patient/.

Schlein, Lisa. "WHO: Influenza Pandemic Remains Global Threat." *VOA News*, 17 Nov. 2016, www.voanews.com/a/world-health-organization-says-influenza-pandemic-remains-global-threat/3601030.html.

Scommegna, Paola. "Dementia Cases Expected to Triple by 2050 as World Population Ages." *Population Reference Bureau*, 8 Nov. 2012, www.prb.org/global-dementia/.

https://doi.org/10.1632/pmla.2018.133.3.700 Published online by Cambridge University Press