
Education in an Age of Limits

MARK BAILDON

National Institute of Education (Singapore)

JAMES S. DAMICO

Indiana University

IT IS NOW EVIDENT the earth's ecology and social systems cannot sustain continued expansion of capitalist productivity, consumerism, and neoliberal notions of progress based on market fundamentalism, the commodification of society, and the privatization of public goods. Neoliberalism has resulted in a war against public values and saps possibilities for democratic solidarity, collaboration, and social obligation (Giroux, 2013). Neoliberal policy, based on an ideology of unbounded self-interest, endless growth, and expansion released from any notions of constraint are environmentally and ethically indefensible. This view of endless growth sees "the world as something that exists only to gratify human desires" (Lasch, 1991, p. 527) and has perpetuated exploitative, colonial-imperial policies and political arrangements that favor dominant groups (Torres, 2017). A view of limitless progress is spread by the influence of big money in media and politics to create a money and media complex (Nichols & McChesney, 2010) that distorts public information, degrades public discourse, and erodes democracy. Unrestrained technological advancement has created a dystopic misinformation system in which "technologies that can be used to enhance and distort what is real are evolving faster than our ability to understand and control or mitigate it" (Warzel, 2018, n.p.).

The post-truth era is characterized by changes in the information system that have created information overload and the wide dissemination of disinformation and misleading information to make it increasingly difficult for citizens to discern reliable information, understand how public policy creates and perpetuates unequal power relations, and find common ground for concerted action (Kavanagh & Rich, 2018). This paper starts with a key premise from author and activist Grace Lee Boggs (1998):

All over the world today we are obviously living in that in-between period of historical time when great numbers of people are aware that they cannot continue in the same old way but are immobilized because they cannot imagine an alternative. (p. 254)

We argue that this understanding points to the failure of large systems (economic, political, educational, etc.) constructed during the period of modernity that prioritized unlimited capitalist growth, technological progress, and unfettered individual freedom (Foucault, 1977), while *at the*

same time imposing particular limits: by the few on the many; on democratic expression; on access to particular kinds of knowledge; by private interests and corporate power over the public good; and on educational decisions about the knowledge, values, and practices considered worth learning. Curriculum practice has been dominated by nationalist and neoliberal interests (Alviar-Martin & Baildon, 2016; Gaudelli, 2009; Myers, 2016) that continue to promote colonialist legacies, the interests of powerful technocratic elites, and prescribed forms of knowledge and systems of accountability that perpetuate capitalist interests, rule by the powerful, and social injustice. We draw on the concept of curriculum as “stories-we-live-by” (Stibbe, 2015) to “flip the script” to make limits the central focus of *stories-to-live-by* and curriculum practice. We contend that only by placing limits on state control, corporate power, and the “madness of economic reason” (Harvey, 2018) can curriculum practice more fully confront all forms of inequality and injustice and help young people learn to play active roles in their communities to make our planet more equal, fair, and sustainable (UNESCO, 2014).

We make the case for curriculum theorizing to envision forms of ecocentric and justice-oriented consciousness education that starts from the premise of the need for environmental limits, while emphasizing social justice and democratic practices, to forge solidarity across political movements (Klein, 2014; Mouffe, 2000; Tuck & Yang, 2018; Tully, 2008). Calling for curricular stories of reconstruction and transformation, we offer curriculum perspectives that might provoke new questions about curriculum in the post-truth age. We highlight literacy and social education curricula that focus on ecolinguistics (Stibbe, 2015), the creation of genuine democratic learning environments, and democratic alternatives to corporate capitalism that draw on traditions of self-restraint and limits in all aspects of life to develop a sustainable ethical vision (Lasch, 1991).

Curriculum as Stories-We-Live-By

A growing body of literature points to the dominance of nationalist and neoliberal discourses that create and perpetuate their own particular “truths.” These “truths” serve as frameworks that shape the everyday vocabularies, values, and social practices that orient people’s understandings and actions in the world (Abowitz & Harnish, 2006; Foucault, 1980). Modern educational systems have historically conveyed nationalist discourses that serve nation-state interests. National education systems accompanied the rise of nation-states in the 18th and 19th centuries to support the bureaucratic functions of the state, enhance national militarization, assimilate new immigrants to develop a shared, national identity, and educate and discipline populations for a range of state projects and national agendas (Green, 2013; Scott, 1998). Curriculum has largely socialized young people into the “official” stories of the nation-state to frame student learning in terms of the nation’s dominant hierarchies, identities, and economic priorities (Apple, 1990; Spring, 2004).

More recently, nation-states have “reinvented themselves as global entities in order to survive in a global economy” (Gaudelli, 2009, p. 71). Young people are increasingly educated to become conversant in the homogenization and hybridity brought by globalization and to participate in capital, either as investor, laborer, consumer, or entrepreneur (Alviar-Martin & Baildon, 2016; Gaudelli, 2009). Neoliberalism is evident in curriculum reform as standards-based reforms, high-stake examinations, international comparisons, and discourses focused on excellence (Alviar-Martin & Baildon, 2016; Davies & Bansel, 2007; Gaudelli, 2009). Recent international educational reforms primarily convey stories about the need for young people to

develop marketable “21st century skills” and capacities to utilize new technologies, along with particular forms of literacy and critical thinking, to solve problems and make informed decisions that will support employability and national competitiveness in the global knowledge economy. We use Stibbe’s (2015) notion of “stories-we-live-by” to analyze and interrogate the “truths” conveyed by these discourses and everyday language patterns. According to Stibbe (2015):

the stories we live by are embedded deeply in the minds of individuals across a society and appear only indirectly between the lines of the texts that circulate in that society. They are therefore not immediately recognizable as stories, and need to be exposed, subjected to critical analysis, and resisted if they are implicated in injustice and environmental destruction. (p. 5)

The notion of stories-we-live-by not only provides a useful analytical tool; it also helps us consider different kinds of *stories-to-live-by* that may be more just, equitable, sustainable, and satisfying. The idea of curriculum as stories requires curriculum theorists to consider the consequences of particular stories embedded in curriculum—the extent to which they may be destructive (in terms of their impact on particular communities and ecological systems), ambivalent (i.e., mixed in their consequences), or beneficial (to promote more sustainable and just outcomes), as well as consider other kinds of stories that might offer different possibilities for curriculum and social futures.

Stibbe (2015), writing from an eco-linguistics perspective, draws on a range of scholars to highlight the ways stories as myths, metaphors, paradigms, and mental models shape how we perceive the world and behave in the world. He uses critical discourse analysis (Fairclough, 2014) and frame theory (Lakoff & Wehling, 2012), among other perspectives, to identify several forms that stories can take through ideological articulations, the frames and metaphors we use to talk about social problems, evaluations about whether something is good or bad, identity formulations, and stories that convey particular convictions (e.g., moral, political, ideological, etc.) and notions of what is important in life. He also argues that stories have to be analyzed for what is erased, omitted, or marginalized and deemed unimportant. These stories shape how we think about ourselves and our roles and obligations in the world, the nature of social problems, and the nature of progress (economic, technological, social, moral, etc.), as well as how we think about curriculum and educational practice. Stibbe elucidates a guiding ecosophy based on principles of well-being, care, environmental limits, and social justice to help us consider how we relate to the natural world and each other (in our social relations) and how we might understand and address the social and ecological challenges of the 21st century.

Stibbe’s work is aligned with others who have identified the ways stories perpetuate injustices and ecological destruction, including stories of progress based on the dominance of society and nature by humans (primarily white men), wealth acquisition, and endless economic growth that structures our language and shapes how we understand ourselves and the world (e.g., Harding, 2008; Klein, 2014; Korten, 2007; Monbiot, 2017). These stories perpetuate notions of limitless growth, consumerism, competition, unfettered individualism, and opposition to government regulation (to support limitless freedom to expand, plunder resources, and exploit labor) that have legacies going back to early capitalism and colonialism. They provide a “logic of domination” (Warren, 1990, p. 125) with hierarchized binaries that inform “how we conceptualize relationships and therefore justify our actions” (Wolfmeyer, Lupinacci, & Chesky, 2017, p. 58). Part of this story is racial neoliberalism (Enck-Wanzer, 2011; Goldberg, 2009) in which race is suppressed “as a legitimate topic or term of public discourse and public policy” (Enck-Wanzer,

2011, p. 24). Instead, a post-racial story or “anti-racialism” is emphasized (as opposed to anti-racism) that “seeks to wipe out the terms of reference, to wipe away the very vocabulary necessary to recall and recollect, to make a case, to make a claim” about the structural conditions of racism (Goldberg, 2009, p. 21).

Curriculum conveys these stories to limit the ways people might understand increasingly complex social contexts and envision the future. Across curricular jurisdictions we now see new logics of educational policy and practice in which “learning is transformed into a direct form of currency” to serve economic ends (Means, 2018, p. 326). There is remarkable consistency in the story curriculum offers young people across the world about how society works, what their roles will be in society, and how they are expected to relate to others and their environment. It is largely a story of economic instrumentalism, driven by the logics of nationalism and neoliberalism. These dominant curricular stories mask problematic features (such as unequal labor relations) or misrepresent the possibilities available to people (Anderson, 2017). They perpetuate the logic of domination and continue to “justify the domination of humans by gender, racial or ethnic, or class status” as well as the domination of nature (Warren, 1990, p. 125).

We Already Live in an Age of Limits

The neoliberal story of limitless economic growth is also a story of limits. It is a story of global corporate power and private interests limiting governmental capacities to regulate multinational corporations (MNCs) and protect the public domain from private capture. The few have sought to impose political and public limits on the many in the name of “expertise,” austerity, deregulation of business, law and order, security, blame, and “winners and losers.” While examples of the domination of wealthy elites and “big money” interests in public institutions are too numerous to elaborate on in this paper, we live in an era of private interests striving to limit democratic participation. Public services have been taken over by private enterprise for profit (e.g., outsourced military/security operations, privatized prisons, etc.). The *Citizens United vs. the Federal Election Commission* Supreme Court case in 2010 gave special interests even more power over individual citizens (MacDougall, 2018) while gerrymandering, voter ID bills, and other efforts have combined to restrict voter participation (Roth, 2016). Attempts to raise issues of inequality, poverty, social injustice, and more sustainable economic development are sullied, cast as socialist or communist *bête noire* in the neoliberal story, thereby, discrediting theoretical and empirical insights that could address a range of social problems.

Perhaps the most important limits have been imposed on citizens’ access to critical perspectives. Six corporations—Viacom, Disney, the News Corporation (Fox News), General Electric, Time Warner, and CBS—own most of the media (Shaker & Heilman, 2008). The new online behemoths of Amazon, Facebook, Google, Apple, and Microsoft have created big tech monopolies not seen since the gilded age (Calloway, 2018). These corporations follow the same script; they ignore what the corporate state wants ignored and champion what the corporate state wants championed (Hedges, 2013). There are numerous examples of corporate interests and political advocacy groups blatantly trying to mislead the public about scientific findings related to tobacco use, acid rain, ozone layer depletion, dichloro diphenyl trichloroethane (DDT), and climate change. Corporate interests are able to enlist and pay scientists to frame the science around these issues in terms of debate when there is strong scientific consensus. These efforts aim to “manufacture” doubt and uncertainty and create false equivalencies between established scientific

findings (and consensus) and more extreme minority scientific views about each of these issues (Oreskes & Conway, 2010). Of course, there is a long history of the role of large media and advertising companies to “manufacture consent” and effectively limit or shape the public’s access to information (Herman & Chomsky, 1988; Lippmann, 1922).

Education in a Post-truth Culture

Information and “truth,” like everything else, has been commodified, with corporate interests and market values dominating public life. Although writing some time ago, the historian Christopher Lasch (1978) noted how the rise of mass media had created “a world of pseudo-events and quasi information” (p. 75) to make “the categories of truth and falsehood irrelevant” (p. 74). Anticipating the role of novelty in spreading falsehood faster, deeper, and broader (Vosoughi, Roy & Aral, 2018), Lasch (1991) wrote that, “The value of news, like that of any other commodity, consists primarily of its novelty, only secondarily of its informational value” (p. 520). The post-truth era is not a recent development. We have been living in a corporate-mediated information environment for quite some time.

Kavanagh and Rich (2018) describe this as “truth decay,” in which news sources are corporatized, increasingly partisan, and intensely driven by profit motives. The wealthy have been able to “buy an infrastructure of persuasion not available to others” (Monbiot, 2017, p. 147). This has created a misinformation ecosystem of unlimited access to information yet one that continually blurs distinctions between fact and opinion, accurate and inaccurate information, and analytical versus ideological interpretations of information. Politically motivated viewpoints drown out verifiable information, leading to a decline in civil discourse and making it more difficult to effectively address significant social and political problems (Kavanagh & Rich, 2018). The transformation of the media system toward social media, the 24-hour news cycle, and increased competition and shrinking profits have contributed to less investigative journalism and more commentary (which is cheaper and more appealing to viewers), limiting our democratic capacity to get reliable, accurate information to take informed action (Kavanagh & Rich, 2018).

In similar fashion, curriculum has been captured by neoliberal and nationalist interests to limit opportunities for teachers and students to more fully address pressing social and ecological issues or to actively construct meaningful civic identities and forms of engagement (Alviar-Martin & Baildon, 2016). Neoliberalism has been the dominant paradigm of international educational policy and a significant impetus of recent educational reforms (Cochran-Smith & Villegas, 2015). The neoliberal curriculum story views education as the key driver of success in the global economy and has resulted in top-down educational policy to enhance national competition on the global stage (Cochran-Smith & Villegas, 2015). This is a story of national education standards, testing systems, accountability schemes, and the “quality control” of teaching to regulate education in ways that make it a “sub-sector of the economy” (McLaren, 2007, p. 27). In general, “governments want control over a compliant teaching profession and see that standards regimes provide the regulatory framework to achieve this end” (Sachs, 2003, p. 6). Increasingly, we see educational reform and curriculum policy that aims to restrict and control educational practice. These reform initiatives have had a negative effect on critical and civic education by narrowing curriculum, requiring teachers to focus on preparing students for exams, and reducing the time teachers can spend on vital social issues of interest to their students (Shaker & Heilman, 2008).

The Need to “Flip the Script”

Government officials, business interests, socioeconomic forces, and parents have always played a greater role in shaping curriculum than curriculum theorists and education professors (Pinar, Reynolds, Slattery, & Taubman, 1995). However, there are practitioners who continue to create curriculum that challenges official curriculum. This curriculum offers counter-stories to official and corporate-sponsored curriculum that tends to serve the interests of domination, privilege, and power to offer curricular stories of reconstruction and transformation. They “flip the script” to present more hopeful *stories-to-live-by* by making justice and ecological sustainability central features of teaching and learning.

Educationalists of all stripes have to find ways to bring this curriculum into classrooms as part of a new reconceptualizing process that makes critical curriculum practice and development central to educational change. There is a need to *enact* critical and creative approaches to reclaim the field, approaches that are explored and developed in the spirit of contestation, challenge, playfulness, and paradox to “select, reshuffle, combine or synthesize already existing facts, ideas, faculties, and skills in original ways to serve new social, economic, and civic purposes” (McWilliam, 2009, p. 283). Creating new curricular stories-to-live-by is first order business—it gives teachers and their students new vocabularies to understand themselves, their social conditions, and possibilities to change “the way we talk, and thereby change what we want to do and what we think we are” (Rorty, 1986, p. 20). Rorty (1986) makes the case for “re-description” in which “the method is to re-describe lots and lots of things in new ways, until you have created a pattern of linguistic behavior which will tempt the rising generation to adopt it” (p. 9). These new patterns are critical and creative, justice-focused, grounded in greater awareness of how language can be used for destructive, ambivalent, or beneficial social and ecological purposes.

A Renewed Urgency to Reconceptualize Curriculum

The work of Prádanos (2018) provides an example of the reconceptualizing process to challenge the dominant growth paradigm of neoliberalism. Prádanos calls for postgrowth imaginaries that provide a conceptual anchor for carrying out diverse, decentralized, and alternative post-capitalist experiments and models. Creating post-capitalist imaginaries in educational practice would similarly require contestations, re-descriptions, and aesthetic-creative work that references postgrowth narratives, decolonizing practices, and new vocabularies and visions for the future to displace mainstream discourses of growth and human exceptionalism. Prádanos (2018) highlights how this process of reconceptualization is being enacted in Spain:

New independent media outlets are challenging corporate media accounts (good Spanish examples include *eldiario.es* and *Saltamos*). Artists are striving to make visible the slow violence that neoliberalism manufactures and hides. Students are demanding not only a public education, but one that is transformational and decolonial as well. Medical staff and patients are turning to counterhegemonic medicine and mindfulness in order to detach their physical and mental health from growth-driven, disempowering, energy-intensive, and technocratically managed mainstream corporate medicine. Transition towns, slow cities, ecovillages, urban community gardens, and repair cafes are thriving. (pp. 235-236)

He concludes by suggesting that dominant imaginaries can be disrupted and replaced by enlarging the space for “what is visible, thinkable, intelligible, perceptible, sayable, and, more importantly, desirable” (p. 237).

Fuller (2018), in his book on post-truth, argues that a “metalinguistic” standpoint is necessary in order to decide which language to use in the post-truth game. His concept of modal power refers to our “capacity to decide what is and what is not possible” and requires us to question “who controls the scope of the possible” (p. 139). For Fuller, it is possible to create new rules of the game, but we must be committed to “play them in advance of their formal ratification” (p. 140). In terms of curriculum, the notion of modal power helps us think about developing curriculum and curriculum development as a “possibility space” (p. 145) that helps create new realities in classrooms and society.

While challenging the power of corporations, government officials, and school administrators to set educational agendas in the neoliberal order seems to be a daunting task, there are signs that teachers are resisting the austerity and privatization driving neoliberal economic and educational policy for the past few decades (Karp & Sanchez, 2018). Teachers’ strikes in 2018 have spread across several states. Such examples of solidarity and collective action inspire hope that educators can similarly challenge neoliberal and nation-centric curriculum practice to engage in what Sørensen (2016) refers to as “constructive resistance” (n.p). Constructive resistance in educational settings would include not only challenging, criticizing, and struggling against particular discourses and concrete policies and initiatives at school, district, state, or national levels; it would also include creatively refusing to participate in these discourses (Žižek, 2006) and constructively working with colleagues within schools and across educational settings to develop the commitments and courage to either create or draw on alternatives. This requires dialogue and community building among like-minded educators, who are fed up with existing discourses that structure current educational practice, to develop teacher-initiated curriculum projects, enact critical pedagogical approaches, or utilize existing critical and transformative curricula (such as those suggested in the next section). Such work must “inspire others to actions that partly replace or lead to the collapse of the dominant way of behaving and thinking” (Sørensen, 2018, n.p.).

There is an urgent need for curriculum stories that speak back forcefully and directly to the limits outlined in earlier sections. These would be stories that feature the ways policy, institutions, power structures, and structural conditions perpetuate logics of domination and limit opportunities to create more just, equitable, and sustainable realities. These stories need to help learners understand how capitalism, neoliberalism, racism, sexism, inequality, environmental degradation, and other forms of injustice are interconnected. But they must also offer concrete stories of resistance, hope, and possibilities for change. In the following section, we offer curricular stories of race and climate change that might enable us to more fully consider “how we live and together build communities using our best visions of what is beautiful, good, and true, [so] the unreflective reproduction of what we find around us, including some if its injustices, might be tamed and changed” (Cherryholmes, 1988, p. 186).

New Curricular Stories about Racism and Climate Change

With our goal to attend to curricular stories of reconstruction and transformation, we turn to the work of two leading scholars and intellectuals, Ibram X. Kendi and Naomi Klein. Ibram Kendi is Professor of History and International Relations and Director of the Antiracist Research

and Policy Center at American University and has done groundbreaking work on the history and development of racist ideas and racial discrimination. Naomi Klein is an acclaimed journalist, author, filmmaker, and social justice advocate and has contributed significantly to helping shape work on climate change and environmental justice.

With his book, *Stamped from the Beginning: The Definitive History of Racist Ideas in America*, which garnered the 2016 National Book Award for Nonfiction, Kendi challenges the prevailing, core idea that racist ideas lead to racist policies. Instead, he argues that racial ideas were and are manufactured in order to legitimize and make possible racist policies that yield economic, political, or cultural benefits for those in power. Put another way, the strand of American racism runs in the opposite direction to the way we normally presume. A core racist idea is about black inferiority and the placing of blame for American racism on the alleged inferiority of African Americans. As Kendi argues, biological racism is largely considered unacceptable and unscientific today, yet there has been a shift to pin blame on African American culture (i.e., living in a culture of poverty). With a culture deemed to be inferior, legal and political practices, such as those leading to the mass incarceration of young black men, are more easily justified and rationalized.

Curricular implications of Kendi's analysis are significant. Because racist ideas stem from discriminatory policies, instead of the inverse, there needs to be clear-eyed engagement with policies that create and maintain inequalities, and Kendi points to six areas to focus this work: criminal justice, education, economics, health, environment, and politics. The racial and environmental injustices linked to the Flint Water Crisis present one curricular opening. In addition to listening to the stories of Flint residents, another text to consider is the report from the Michigan Civil Rights Commission (2017) that examined the crisis and concluded that "historical, structural and systemic racism combined with implicit bias" (n.p.) played a prominent role in the crisis. Kendi demonstrates that the real foundation of racism is not hate, fear, or ignorance, but economic, political, and cultural self-interest, which means that efforts to highlight exemplary black people or focus on helping white people overcome ignorance and hate is not the curricular road to travel to end racism, because the necessary emphasis on policy and power structures and institutions can be lost.

One invaluable resource that promotes systemic and structural analysis about racism and other social injustices is the Zinn Education Project, a joint effort of two long-time justice-focused educational organizations, Rethinking Schools and Teaching for Change (2019). The Zinn Education Project, namesake derived from the noted historian and civil rights advocate, Howard Zinn, offers a wide array of critical, justice-centric curricular and teaching materials across a wide range of themes. One curricular example that aligns with Kendi's argument is an activity called "The Color Line," in which veteran social studies teacher and curriculum author, Bill Bigelow (2019), draws from Howard Zinn's (1980) book, *A People's History of the United States*, to help students understand how the origins of racism and racial inequalities in the U.S. are linked to colonial laws that benefited wealthy property owners. Through a series of prompts, Bigelow guides students to make predictions about what laws or policies might have been adopted to prevent Indians and blacks from uniting, to discourage or punish black slaves and white indentured servants from running away together, and to keep blacks and whites separate. Through class readings and discussion, students can come to understand how wealthy landowners used the construct of race (and racism) to, for example, thwart attempts of white indentured servants and enslaved Africans from combining forces in a shared struggle for economic rights and to lead white servants to believe any discernible gains of blacks were due to their loss. The podcast series

“Seeing White” (Scene on Radio, 2018) can serve as rich companion resources with historical examples and analysis of white supremacy and racial discrimination. Rethinking Schools and the Zinn Education Project (2019) also offer resources to engage more present-day racial inequalities, such as how to teach about the Black Lives Matter movement. Additional media resources about the Black Lives Matter movement, especially the stories of the on-the-ground leaders and activists, can also be harnessed for empowering curriculum (e.g., Khan-Cullors & Bandele, 2018).

Another set of resources to help students understand the complex legacy and continuing force of white supremacy in the U.S. come from the Unitarian Universalist Church (2019), which offers a curriculum with sections on: The History of White Supremacy in the United States, The Emotional Lives of White People, Racial Identity Development, Racial Identity Journey, White Power and Privilege, and Developing a Positive White Identity. This type of resource locates the work of naming and dismantling white privilege with white people (Brown, 2018; DiAngelo, 2018). It provides a curricular example of how a crucial aspect of the logic of domination can be challenged.

In terms of new curricular stories to grapple with climate change, Naomi Klein’s (2014) book, *This Changes Everything*, provides a comprehensive starting point. A companion website to the book *This Changes Everything* (Klein, 2014) and the documentary film (Lewis, Barnes, & Lewis, 2015) offers curriculum materials that aim to “help users look critically at the idea of how our economic system’s push for continual growth impacts both the environment and quality of life for all people” (This Changes Everything, 2019). These materials, for example, guide learners to carefully analyze the global economy’s impact on the planet and how wealthier countries, whose economic growth has adversely impacted poorer countries, owe a “climate debt” to these affected countries. These types of resources set the stage for exploring examples and stories of forward-looking justice work, which includes stories about how communities can change the world and create cleaner and more just economies by connecting to their core values in ways that engage civic participation and move toward more equitable economic and social opportunities and outcomes.

In one activity called “Reinventing a Clean and Just Economy” (This Changes Everything, 2019), teachers can guide learners to examine the case study of Henry Red Cloud, who left a job in the steel industry to launch his own solar power company that provided jobs for an Indian Reservation in North Dakota with a larger goal to help First Nations people achieve energy independence. With this type of case study, learners glean insights into how both economic and non-economic factors shape the decisions of an entrepreneur and how it is possible to create mutually beneficial outcomes for the environment, economy, and the community. The *This Changes Everything* website also includes examples of “beautiful solutions” (This Changes Everything, 2019), an archival resource of empowering strategies and programs that promote climate justice work in the world. A related project is the Mary Robinson Foundation for Climate Justice (2019). Robinson, the first female President of Ireland, also launched a podcast called “Mothers of Invention” (Robinson & Higgins, 2019) with an emphasis on feminist perspectives and solutions for climate change.

Additional curricular resources offer teachers guidance in working on climate change issues. For curricular resources that dive more deeply into the science of climate change, Stanford University (n.d.) offers middle school and high school teachers and students global climate change curricula. Beach, Share, and Webb (2017) map out four curricular areas including indigenous and postcolonial perspectives, capitalism and consumerism, environmental literature and ecocritical teaching (e.g., cli-fi), and human based systems. While the target audience for this book is English

language arts teachers, the ideas and activities are multidisciplinary. The book, *A People's Curriculum for the Earth* (Bigelow & Swinehart, 2014), is another comprehensive collection of teaching ideas and activities for teaching about climate change and environmental justice. Along with this book, *Rethinking Schools* also offers a “climate justice resource kit” to promote school-wide efforts to create climate justice curriculum. The Choices Program from Brown University (2019) has also published curricular materials about climate change and justice. Situated in mathematics, *Rethinking Schools* also offers a comprehensive set of teaching materials, including activities that focus on environmental racism, to help students learn “social justice by the numbers” (Gutstein & Peterson, 2013). Stepping outside of more developed teaching materials, there are additional pro-justice resources to consider using to develop curriculum with learners of different ages. There is no shortage of inspiring, impactful work led by youth and young adults in the area of climate change. For example, *This Is Zero Hour* (Zero Hour, 2019) is a movement that provides training and resources with and for diverse youth and engages in direct action to confront environmental justice.

The book, *When We Fight We Win! Twenty-First Century Social Movements and the Activists That Are Transforming Our World* (Jobin-Leeds & AgitArte, 2016), chronicles the struggles and successes of intergenerational activists, artists, and educators to mobilize and advance the LGBTQ movement, reclaim public education, end mass incarceration, challenge economic inequality, and strive for environmental justice. In another book, *The Revolution Where You Live: Stories from A 12,000 Mile Journey Through a New America*, Sarah Van Gelder (2017) documents a range of innovative ideas and solutions people in local communities are enacting to confront poverty and inequality, racism, and the climate crisis. As with *When We Fight We Win!*, these stories can serve as *teaching texts*, providing opportunities for teachers to guide students in understanding the challenges and possibilities of shifting from more individualistic, isolated, and consumer-driven lives to more connected, purposeful, and more meaningful lives.

In addition to curricular work in the areas of racial justice and climate change, there are stories of youth and young adults doing empowering work in the world. Consider the efforts to end gun violence led by students from Marjory Stoneman Douglas High School in Florida after the mass shooting in February 2018. The “March for Our Lives” initiative, which included a 2018 summer tour to change public policy, outlined a core set of practical goals, including: universal, comprehensive background checks; making the Bureau of Alcohol, Tobacco, Firearms, and Explosives accountable with a digitized, searchable database; providing research into gun violence in the U.S.; and instituting a high-capacity magazine ban, as well as a ban on semi-automatic rifles.

There are many more examples of curricular work in the areas of racial and environmental justice, as well as stories of empowerment and transformation that could be added to the few we offer. Just as Wolfmeyer et al. (2017) have noted “the emergence of a new program in curriculum studies that attends to both the social and environmental issues we face today” (p. 53), there are signs of a growing body of curriculum work that empowers teachers and students to engage with these issues in meaningful ways and to challenge logics of domination.

Conclusion: Theorizing and Developing Powerful Curriculum in an Age of Limits

Lies, misinformation, disinformation, falsehood, and the post-truth condition are not something new (Fuller, 2018). Regimes (whether political, ideological, or economic) are held captive to their own lies, pretensions, and falsehoods (Havel, 1978), yet “where there is power,

there is resistance” (Foucault, 1978, p. 95), and people have always created “forms of informal cooperation, coordination, and action that embody mutuality without hierarchy” (Scott, 2012, p. xxi). The curriculum “stories” outlined above that we, as educators, can live by are stories of resistance, struggle, and transformation of social injustices. Stories of everyday resistance—historical and contemporary—can become a more integral part of educational practice and provide the space to imagine and plan for a better world.

The post-truth era is just another symptom (of the systems and logics) that makes concerted action to address pressing issues facing humanity and the planet increasingly difficult. However, we have reached an age when the ecological limits of neoliberal hyper-capitalism call for urgent action. The modern economic, political, social, educational, and communications systems of modernity are being challenged on many fronts. The logic of domination, premised on anthropocentrism, patriarchy, white supremacy and racism, and other “value-hierarchized dualisms so central to Western industrial culture” (Wolfmeyer et al., 2017, p. 56), has continued to impact the planet and communities in ways that can no longer be tolerated. As educators, we are called to respond.

To counter the neoliberal story of endless growth, we propose a story of limits. It is a story that conveys the need for human beings to recognize ethical limits—the limits to behavior necessary to care for and share the planet with other living beings, of the need for individuals to learn the self-restraint necessary to control their impulses—and to understand that democracy itself is premised on the idea of limits (to power, the influence of big money, to private interest, the exploitation of labor and resources, etc.). And curriculum is necessarily limited, requiring curriculum developers to make decisions about what to include and exclude, such as the need to more directly and honestly deal with the history of racist ideas and practices in our country (Kendi, 2016). As Danielle Allen (2004) argues, “The manifestations of limitation...must be met with an ethical framework and treatment techniques that are proper to our limits” (p. 91). Curriculum must embody an ethical framework and provide a range of techniques that help us recognize the role of limits in our personal and public lives. Acknowledging and establishing acceptable limits are central to living in society.

The curricular stories we highlighted in this article suggest particular kinds of limits: ecological limits that necessitate more sustainable visions of life; limits that are needed to challenge and undo racist policies and dismantle white supremacy; limits that manifest themselves in multiple forms of critical investigation and resistance in order to confront structural and systemic conditions that perpetuate racism, inequality, and environmental destruction; and the limited capacity of fragmented school curriculum to understand and address the interrelated issues of racism and climate change. In their recognition of the limits of current social, economic, and political conditions, these curricular stories offer the potential for “beautiful solutions” and vital resources, empowering strategies, and justice-oriented perspectives to create new stories of reconstruction and transformation in communities. These curricular stories offer stories of constraint and hope, of progress grounded in an ethical vision of limits and justice.

In doing so, these curricular stories provide foundational principles for curriculum theory and development in the post-truth era. The first is an unwavering belief in the equality of all people. This is the cornerstone of Kendi’s book, perhaps best captured in his statement that nothing needs to be done to black people to create equality because there is nothing wrong with black people. “The only thing wrong with Black people is that we think something is wrong with Black people...[and] the only thing extraordinary about White people is that they think something is extraordinary about White people” (2016, pp. 10-11). This does not mean race is suppressed in the

name of equality, but rather the legacies and structural conditions of racism are directly confronted. Any curriculum that does not take a strong stance with this principle is not to be pursued. A second guiding principle is the deep integration and unity of all living things. Perhaps the most limiting, damaging, and fundamentally misguided perspective is that human beings are separate from the environment. This dualism, which externalizes human experience, is the fundamental factor of our Anthropocene era. Moving toward a redescription, Kalmus (2017) argues for a linguistic shift for how we talk about climate change. This includes replacing “environment” (which implies a separation from human beings) with “biosphere” which is inclusive of all life. Both principles point to the need for greater awareness of how our language can limit the ways we think about the world and our relationships with others.

The stories-we-live-by play a central role in helping people orient themselves in society, develop a sense of identity and agency, trust one another, and envision possible futures. We agree with Fuller (2018) that the post-truth condition provides what the Greek sophists termed *kairos*, an opportune moment or a tipping point when the rules of the “knowledge game” can be recast, re-imagined. Curriculum for a post-truth age must be directed toward ideas of social and environmental justice if we are to break from the logics of domination rooted in capitalism, colonialism, patriarchy, and white supremacy. In doing so, new teleological imperatives can be articulated, new capacities “to decide what is and what is not possible” (Fuller, 2018, n.p.). The curricular examples we have provided are intended to stimulate further curriculum work in these directions.

References

- Abowitz, K. K., & Harnish, J. (2006). Contemporary discourses of citizenship. *Review of Educational Research* 76(4), 653-690.
- Allen, D. (2004). *Talking to strangers: Anxieties of citizenship since Brown v. Board of Education*. Chicago, IL: University of Chicago Press.
- Alviar-Martin, T., & Baildon, M. (2016). Context and curriculum in two global cities: A study of discourses of citizenship in Hong Kong and Singapore. *Education Policy Analysis Archives*, 24(58), 1-31.
- Anderson, E. (2017). *Private government: How employers rule our lives (and why we don't talk about it)*. Princeton, NJ: Princeton University Press.
- Apple, M. (1990). *Ideology and curriculum*. New York, NY: Routledge.
- Beach, R., Share, J., & Webb, A. (2017). *Teaching climate change to adolescents: Reading, writing, and making a difference*. New York, NY: Routledge.
- Bigelow, B. (2019). *The color line* [teaching activity]. Retrieved from <https://www.zinnedproject.org/materials/color-line-colonial-laws>
- Bigelow, B., & Swinehart, T. (Eds.) (2014). *A people's curriculum for the earth*. Milwaukee, WI: Rethinking Schools.
- Boggs, G. L. (1998). *Living for change: An autobiography*. Minneapolis, MN: University of Minnesota Press.
- Brown, A. C. (2018). *I'm still here: Black dignity in a world made for whiteness*. New York, NY: Convergent.
- Brown University. (2019). *About the choices program*. Retrieved from <https://www.choices.edu/about/>

- Calloway, S. (2018). Silicon Valley's tax-avoiding, job-killing, soul-sucking machine. *Esquire*. Retrieved from <https://www.esquire.com/news-politics/a15895746/bust-big-tech-silicon-valley/>
- Cherryholmes, C. H. (1988). *Power and criticism: Poststructural investigations in education*. New York, NY: Teachers College Press.
- Cochran-Smith, M., & Villegas, A. M. (2015). Framing teacher education research: An overview of the field, Part 1. *Journal of Teacher Education*, 66(1), 7-20.
- Davies, B., & Bansel, P. (2007). Neoliberalism and education. *International Journal of Qualitative Studies in Education*, 20(3), 247-259.
- DiAngelo, R. (2018). *White fragility: Why it's so hard for white people to talk about racism*. Boston, MA: Beacon Press.
- Enck-Wanzer, D. (2011). Barack Obama, the Tea Party, and the threat of race: On racial neoliberalism and born again racism. *Communication, Culture & Critique*, 4, 23-30. Retrieved from http://darrel.wanzerserrano.com/wp-content/uploads/Enck-Wanzer_Tea_Party_Essay.pdf
- Fairclough, N. (2014). *Critical language awareness*. New York, NY: Routledge.
- Foucault, M. (1977). *Discipline and punish: The birth of the prison*. New York, NY: Pantheon.
- Foucault, M. (1978). *The history of sexuality: Vol I*. London, UK: Penguin.
- Foucault, M. (1980). *Power/Knowledge*. New York, NY: Random House.
- Fuller, S. (2018). *Post-truth: Knowledge as a power game*. New York, NY: Anthem Press.
- Gaudelli, W. (2009). Heuristics of global citizenship discourses towards curriculum enhancement. *Journal of Curriculum Theorizing*, 25(1), 68-85.
- Giroux, H. (2013, March 26). Neoliberalism and the politics of higher education. Interview with C.J. Polychroniou. *Truthout*. Retrieved from <http://truth-out.org/news/item/15237-predatory-capitalism-and-the-attack-on-higher-education-an-interview-with-henry-a-giroux>
- Goldberg, D. T. (2009). *The threat of race: Reflections on racial neoliberalism*. Malden, MA: Wiley-Blackwell.
- Green, A. (2013). *Education and state formation: Europe, East Asia and the USA*. Basingstoke, UK: Palgrave Macmillan.
- Gutstein, E., & Peterson, R. (2013). *Rethinking mathematics: Teaching social justice by the numbers* (2nd ed.). Milwaukee, WI: Rethinking Schools.
- Harding, S. (2008). *Science from below: Feminisms, postcolonialities, and modernities*. Durham, NC: Duke University Press.
- Harvey, D. (2018). *Marx, capital and the madness of economic reason*. London, UK: Profile Books.
- Havel, V. (1978). *The power of the powerless*. Retrieved from https://s3.amazonaws.com/Random_Public_Files/powerless.pdf
- Hedges, C. (2013). The day that TV news died. *Truthdig*. Retrieved from <https://www.truthdig.com/articles/the-day-that-tv-news-died/>
- Herman, E. S., & Chomsky, N. (1988). *Manufacturing consent: The political economy of the mass media*. New York, NY: Pantheon Books.
- Jobin-Leeds, G., & AgitArte. (2016). *We fight we win! 21st-century social movements and the activists that are transforming our world*. New York, NY: The New Press.
- Kalmus, P. (2017). *Being the change: Live well and spark a climate revolution*. BC, Canada: New Society Publishers.

- Karp, S., & Sanchez, A. (2018). The 2018 wave of teacher strikes: A turning point for our schools? *Rethinking Schools*, 32(4), Summer, 2018. Retrieved from <https://www.rethinkingschools.org/articles/the-2018-wave-of-teacher-strikes>
- Kavanagh, J., & Rich, M. D. (2018). *Truth decay: An initial exploration of the diminishing role of facts and analysis in American public life*. Santa Monica, CA: Rand Corporation.
- Kendi, I. X. (2016). *Stamped from the beginning: The definitive history of racist ideas in America*. New York: NY: Nation Books.
- Khan-Cullors, P., & Bandele, A. (2018). *When they call you a terrorist: A black lives matter memoir*. New York: St. Martin's Press.
- Klein, N. (2014). *This changes everything: Capitalism vs the climate*. New York, NY: Simon & Schuster.
- Korten, D. C. (2007). *The great turning: From empire to earth community*. Oakland, CA: Berrett-Koehler Publishers.
- Lakoff, G., & Wehling, E. (2012). *The little blue book: The essential guide to thinking and talking democratic*. New York, NY: Free Press.
- Lasch, C. (1978). *The culture of narcissism: American life in an age of diminishing expectations*. New York, NY: W. W. Norton.
- Lasch, C. (1991). *The true and only heaven: Progress and its critics*. New York, NY: W. W. Norton & Company.
- Lewis, A. (Director), Barnes, J., & Lewis, A. (Producers). (September 13, 2015). *This changes everything* [motion picture]. This Changes Everything.org.
- Lippmann, W. (1922). *Public opinion*. New York, NY: Harcourt Brace.
- MacDougall, I. (2018, March). Empty suits: Defamation law and the price of dissent. *Harpers*. Retrieved from <https://harpers.org/archive/2018/03/empty-suits>
- Mary Robinson Foundation for Climate Justice. (2019). *Resources*. Retrieved from <https://www.mrfcj.org/resources/>
- McLaren, P. (2007). This fist called my heart: Public pedagogy in the belly of the beast. *Antipode*, 40(3), 472-481.
- McWilliam, E. (2009). Teaching for creativity: From sage to guide to meddler. *Asia Pacific Journal of Education*, 29(3), 281-293.
- Means, A. J. (2018). Platform learning and on-demand labor: Sociotechnical projections on the future of education and work. *Learning, Media and Technology*, 43(3), 326-338.
- Michigan Civil Rights Commission. (2017). *Michigan Civil Rights Commission Report: Race and racism played roles in causing the Flint Water Crisis, and both blacks and whites are victims*. Retrieved from <https://www.michigan.gov/mdcr/0,4613,7-138--405318--a,00.html>
- Monbiot, G. (2017). *Out of the wreckage: A new politics in an age of crisis*. New York, NY: Verso.
- Mouffe, C. (2000). Deliberative democracy or agonistic pluralism. *Political Science Series*, 72, 1-17.
- Myers, J. P. (2016). Charting a democratic course for global citizenship education: Research directions and current challenges. *Education Policy Analysis Archives*, 24(55), 1-16.
- Nichols, J., & McChesney, R. W. (2010). The money & media election complex. *The Nation*. Retrieved from <http://www.thenation.com/article/money-media-election-complex/>
- Oreskes, N., & Conway, E. M. (2010). *Merchants of doubt*. New York, NY: Bloomsbury Press.

- Pinar, W. F., Reynolds, W. M., Slattery, P., & Taubman, P. M. (Eds.) (1995). *Understanding curriculum: An introduction to the study of historical and contemporary curriculum discourses*. New York, NY: Peter Lang.
- Prádanos, L. I. (2018). *Postgrowth imaginaries: New ecologies and counterhegemonic culture in post-2008 Spain- Conclusion*. *Modern Languages Open*. Retrieved from <https://www.modernlanguagesopen.org/collections/special/postgrowth-imaginaries-new-ecologies-and-counterhegemonic-culture-in-post-2008-spain/>
- Rethinking Schools & Teaching for Change. (2019). *Zinn education project*. Retrieved from <https://www.zinnedproject.org/>
- Rethinking Schools & the Zinn Education Project. (2019). *Teaching for black lives*. Retrieved from <https://www.teachingforblacklives.org/>
- Robinson, M., & Higgins, M. (2019). Mothers of invention [podcast]. Retrieved from <https://www.mothersofinvention.online/>
- Rorty, R. (1986). *Contingency, irony, and solidarity*. Cambridge, UK: Cambridge University Press.
- Roth, Z. (2016). *The great suppression: Voting rights, corporate cash, and the conservative assault on democracy*. New York, NY: Crown.
- Sachs, J. (2003, September). *Teacher activism: Mobilising the profession*. Plenary address presented to the *British Educational Research Association Conference*, Edinburgh.
- Scene on Radio. (2018). *Seeing white* [podcast]. Durham, NC: Center for Documentary Studies at Duke University. Retrieved from <http://www.sceneonradio.org/seeing-white/>
- Scott, J. C. (1998), *Seeing like a state: How certain schemes to improve the human condition have failed*. New Haven, CT: Yale University Press.
- Scott, J. C. (2012), *Two cheers for anarchism*. Princeton, NJ: Princeton University Press.
- Shaker, P., & Heilman, E. E. (2008). *Reclaiming education for democracy: Thinking beyond No Child Left Behind*. New York, NY: Routledge.
- Sørensen, M. J., 2016. Constructive resistance: Conceptualising and mapping the terrain. *Journal of Resistance Studies*, 2(1), 49–78. Retrieved from <https://resistance-journal.org/2017/08/constructive-resistance-conceptualising-and-mapping-the-terrain/>
- Spring, J. H. (2004). *The intersection of cultures: Multicultural education in the United States and the global economy*. Boston, MA: McGraw-Hill.
- Stanford University. (n.d.) Climate change education. Retrieved from <https://pangea.stanford.edu/programs/outreach/climatechange/curriculum>
- Stibbe, A. (2015). *Ecolinguistics: Language, ecology and the stories we live by*. New York, NY: Routledge.
- This Changes Everything. (2019). *This changes everything*. Retrieved from <https://thischangeseverything.org/>
- Torres, C. A. (2017). *Theoretical and empirical foundations of critical global citizenship education*. New York, NY: Routledge.
- Tuck, E., & Yang, K. W. (2018). *Toward what justice? Describing diverse dreams of justice in education*. New York, NY: Routledge.
- Tully, J. (2008). *Public philosophy in a new key: Volume 2, Imperialism and civic freedom*. Cambridge, UK: Cambridge University Press.
- UNESCO (2014). *Global citizenship education: Preparing learners for the challenges of the 21st century*. Paris: UNESCO.

- Unitarian Universalist Church. (2019). *Examining whiteness: An anti-racism curriculum*. Retrieved from <https://www.uua.org/racial-justice/curricula/whiteness>
- van Gelder, S. (2017). *The revolution where you live: Stories from a 12,000 mile journey through a new America*. Oakland, CA: Berrett-Koehler.
- Vosoughi, S., Roy, D., & Aral, S. (2018). The spread of true and false news online. *Science*, 359, 1146-1151.
- Warren, K. (1990). The power and the promise of ecological feminism. *Environmental Ethics*, 12(2), 125-146.
- Warzel, C. (2018). Infocalypse now: He predicted the 2016 fake news crisis. Now he's worried about an information apocalypse. *Buzzfeed*. Retrieved from <https://pubtechgator.bmj.com/2018/02/he-predicted-the-2016-fake-news-crisis-now-hes-worried-about-an-information-apocalypse/>
- Wolfmeyer, M., Lupinacci, J., & Chesky, N. (2017). EcoJustice mathematics education: An ecocritical (re)consideration for 21st century curricular challenges. *Journal of Curriculum Theorizing*, 32(2), 53-71.
- Zero Hour. (2019). *Getting to the roots of climate change*. Retrieved from <http://thisiszerohour.org/>
- Zinn, H. (1980). *A people's history of the United States*. New York, NY: Harper & Row.
- Žižek, S. (2006). *The parallax view*. Cambridge, MA: MIT Press.

