

DOI:10.14394/eidos.jpc.2020.0023

Harry C. Boyte
Public Work Philosophy
Augsburg University (Minneapolis), USA
<https://orcid.org/0000-0002-9521-0910>

Marie-Louise Ström
<https://orcid.org/0000-0001-6863-4331>

Agency in an AI Avalanche: Education for Citizen Empowerment

Education and Democracy

Even before the global pandemic of COVID-19 dramatized the vulnerability of the world's systems of collective action and decision-making, apocalyptic warnings abounded about democracy's future. "We are entering the age of strong men," says the conservative *New York Times* columnist David Brooks. "In America the basic fabric of civic self-government seems to be eroding following the loss of faith in democratic ideals."¹ The left wing intellectual Samuel Freeman sees relevance for Frankfurt School pessimism, holding that "capitalist consumer culture makes emancipation impossible."² Pankaj Mishra in *Age of Anger* sees a metastasizing rage against modernity. "Existential resentment ... [is] caused by an intense mix of envy and sense of humiliation and powerlessness ... as it lingers and deepens [it] poisons civil society and undermines political liberty and is presently making for a global turn to authoritarianism."³

In such alarms, education is missing as either a contributor to democracy's problems or a way to address them. In contrast, the American pragmatist philosopher John Dewey saw education as critical to democratic society and democracy as central to the educational enterprise. "It is the main business of the family and the

1) Brooks, "The Crisis of Western Civ."

2) Freeman, "The Headquarters of Neo-Marxism," 4.

3) Ignatieff, "Which Way Are We Going?" 1.

school to influence directly the formation and growth of attitudes and dispositions, emotional, intellectual and moral,” wrote Dewey. “Whether this educative process is carried on in a predominantly democratic or non-democratic way becomes ... a question of transcendent importance not only for education itself but for ... the democratic way of life.”⁴

We argue that AI accelerates the challenges facing democracy. Education with democratic purposes is a profound resource for meeting them.

The AI Avalanche

Artificial intelligence (AI) is advancing in education, as elsewhere. In every context AI involves four elements described by Toby Walsh, professor of Artificial Intelligence at the University of New South Wales in Australia. First, he says, “Computational problems that were previously impractical are now becoming possible.” Second, a vast amount of data is available on-line, doubling roughly every two years. Thirdly, algorithms, rules which computers use in problem-solving, expand processing power. Fourth, new venture funds are flooding into the field. As Walsh puts it, “The amount of venture funding being invested in AI startups is doubling every two years.”⁵

Many see the advance of AI as inexorable, even if it raises ethical concerns. Walsh, for example, argues that while the AI revolution will have enormous impacts on economic, political, and social systems, the main question is how fast human intelligence, understood as computational capacity, will be replaced. “While the human brain is one of the most complex systems we know,” he says, “most experts in AI estimate it will take at least 50 years to get to human intelligence. Very few expect it will take much longer than a century.”⁶

Increasing processing power and the ready availability of data can bring undeniable benefits in education as elsewhere. In the classroom, students everywhere have access to information that only a few decades ago was housed at a select few elite institutions. Teachers can monitor student learning in real-time. Technology enables creative lesson planning and even flipped classrooms. Teachers, parents, and administrators are now more able to identify common misunderstandings or gaps in student learning; students are less likely to be lost in the shuffle when their learning is tracked and monitored. When we view data and technology as educational tools, not ends in themselves, the digital revolution is a powerful resource.

Yet overly celebratory views of AI’s spread neglect the urgent need for collective decision-making about what AI should be used *for*. Increased computing power and smart-learning machines make it easier to see education as the process of monitoring and analyzing student performance on knowledge acquisition and little else. Unsurprisingly the tech industry is pouring money into education understood in this way, both philanthropically and for profit.⁷ DreamBox, a math program funded by Netflix founder Reed Hastings, uses an algorithm that processes up to fifty thousand data points per student per hour to create personalized lessons. Mark Zuckerberg has helped develop and promote technology that helps students teach themselves.⁸ One for-profit Silicon Valley startup operating in Africa, Bridge International Academies, has largely removed human teachers from the classroom. Bridge “teachers,” usually without any professional training, read scripts developed by

4) LW 11, 221–222.

5) Walsh, “The AI Revolution,” 3.

6) *Ibid.*, 4.

7) Boyte et. al., *Awakening Democracy through Public Work*. This discussion of the dangers of depersonalized education in an AI world and Barnhill’s worries draws from Chapter Three.

8) Singer, “The Silicon Valley Billionaires.”

former Boston-area charter school teachers to their African students.⁹ While the technology varies from place to place, the goal is quantifiable growth on standardized assessments.

Such developments left Paul Barnwell, a veteran high school educator, wondering whether he would soon be obsolete. While sympathetic to using technology to identify and target student needs, he worries about its misuse: “[Personalized learning] initiatives often become software or technology-based, with digital ‘instruction’ adjusting based on competency levels or skills of its student users. It’s not about student passion or authentic projects – it’s all about remediating and measuring specific academic skills.” Technology, then, is employed in service of a predetermined and unquestioned end: quantifiable growth. “Instead of a teacher striving to know a student on multiple levels – from understanding the nuances of his or her academic skills, to building positive relationships and crafting learning experiences based on more than numerical reading scores – educators are sidelined when a machine takes over. Personalized learning often becomes inherently impersonal; it’s a sterile approach to messy, complex classroom processes.”¹⁰

Across the world, teachers like Barnwell worry that the accelerating advance of Artificial Intelligence, tied to a radically reductionist view of education, portends a replacement of human teachers with technology. The “gospel of efficiency,” with a singular focus on cost savings and speed of “delivery,” fuels this process.¹¹ Efficiency, as Neal Postman puts it, generates the idea that “society is best served when human beings are placed at the disposal of their techniques and technology ... worth less than their machinery.”¹²

People need to be put back at the center of education and technology needs to become the servant, not the master, of educational practices specifically. This requires sustained and deep attention to the *purposes* of education. If still too rare, such discussions do appear in major public forums. The educational philosopher Gert Biesta argued in this vein in a keynote address to the 2019 World Education Research Association (WERA) meeting in Tokyo. Education today, said Biesta, is driven by narrowly defined outcomes with little attention to larger purposes. “The school [today] is called to perform... in very particular ways, called ‘measurable learning outcomes,’” he said. This imperative makes it difficult or impossible for school to embody its original Greek meaning, *scholē* – interpreted by Biesta as a space where students become “subjects” or self-directed human agents, not merely objects of instruction defined by invisible curricular experts. The instructional model produces dissatisfied teachers, students, politicians, and broader publics. Biesta calls for a focus on democracy as the main goal of education. In a democratic society, he argues, “individual desires” are transformed into “collective desirables” as students learn the difficult process of engaging with a real world of plural interests and views.¹³

Engaging in real world democracy depends on *civic agency*, the capacity for intentional, self-organized collective action across differences to address common challenges and shape a rapidly changing world. The argument in *Preparing for the Best and Worst of Times*, the report by a consortium of researchers at the University of Sydney is compelling here: To thrive, not simply survive, in an AI world requires a “new settlement” that prioritizes nurturing active citizens – far more important than training highly adaptable workers, which is often touted as the answer to changes being generated by AI. The report also advocates much deeper school engagement with communities and employers and attention to the craft of teaching. Civic agency, as we develop the concept, is crucial to the settlement envisioned in the report.

9) Tyre, “Can a Tech Start-Up Successfully Educate?”

10) Barnwell, “Are Teachers Becoming Obsolete?”

11) On the “gospel of efficiency,” see Hays, *Conservation and the Gospel of Efficiency*; on the way AI accelerates the efficiency culture and its effects on education, see Boyte, “John Dewey and Citizen Politics,” 10–44.

12) Kanigel, *The One Best Way*, 16.

13) Biesta, “What Kind of Society Does the School Need?”

Outline of This Essay

In this essay, drawing on the case of Australia in particular, we develop the argument of “schools for democracy” as part of communities that prioritize developing people’s civic agency for human flourishing. We begin with the concept of social capital – norms, values, and practices of trust and reciprocity essential to vibrant civic life and healthy democratic society – and discuss social capital’s decline in recent years as well as its relationship to what we call public work. Declining social capital and growing demands for politicians and experts to “fix things” turn citizens into spectators, largely devoid of responsibility for addressing public challenges like AI and erode hope for the future. Here, we concentrate mainly on a specific danger related to this dynamic that threatens the cultural and social foundations of democracy and is directly connected to schools and their potential for addressing the danger: In the context of declining community life, social media and other digital platforms shaped by AI can spread an “us-versus-them” mindset that feeds polarization and inflamed divisions, far beyond the formal electoral system.

Second, we argue that civic agency holds potential to respond to the threats of polarization and division. It addresses the despair many feel about declining social ties by offering new ways to generate both “bonding” social capital and “bridging” social capital, spaces of epistemic diversity where face-to-face interaction and relationship-building take place among people with different views, interests, and ways of knowing. We compare the understanding of democracy based on civic agency and public work with the other dominant models of democracy.

Third, we discuss what different models of democracy education can contribute to the role of schools in meeting threats to civic life and human agency of the digital revolution. We conclude with highlighting “citizen teachers” as crucial to a new educational settlement with democracy at its center.

Social Capital and Democracy

Robert Putnam’s *Making Democracy Work*, a landmark study of Italian regional governments published in 1993, demonstrated the close link between effective governance and vibrant civic life based on norms of equality, trust, reciprocity and horizontal relationships among citizens. Putnam and others call such networks based on trust and reciprocity “social capital,” bonding relationships and the practices and values which build and sustain them. Theorists of social capital like Putnam argue that it is key to high institutional performance and the maintenance of democracy, and further suggest a close tie between social capital and “civil society” as the site of voluntary activities and associations where social capital develops.¹⁴

As James Farr has shown, the idea of social capital can be found in the work of educational philosopher John Dewey a hundred years ago,¹⁵ but Putnam’s book created a new public awareness of the concept around the world. Practices which generate social capital became topics of discussion and debate in public life and policy, including in Australia. Social capital also shifted the lens about democracy, from a narrow focus on elections and government which had dominated for decades,¹⁶ to the larger culture and the role of citizens in creating and sustaining democracy. This lens also expands the role of citizens and schools in meeting threats from AI.

14) Putnam, *Making Democracy Work*.

15) Farr, “The Secret History of Social Capital.”

16) On shrinking of views of democracy to a narrow focus on elections and formal institutions, see Boyte, “Reframing Democracy,” 536–546.

Australia was once widely touted for its high levels of social capital. “Australia in the post-war era was a nation of joiners,” observed Andrew Leigh, a member of Putnam’s research team at Harvard, and later an economics professor at the Australian National University, author of a major study of social capital in Australia, and now a Labor member of Parliament. Leigh cites many examples of strong social networks. In the 1950s, 35 percent of the population went to religious services at least once a week. In 1967, the number of Australians active in civic groups was 33 percent. In the 1980s, half of Australian workers were in unions.¹⁷ Discussion of social capital influenced public policies and debate in Australia. For instance, proposals for public support for building youth social capital became a major campaign issue in the 2007 election, when the Labor Party ran on a platform for strengthening civic participation of young people.¹⁸

By the late 1990s, civic researchers began to document the sharp erosion of social capital. Putnam’s second book, *Bowling Alone*, captured the problem in the title: more people were bowling but by themselves. Bowling leagues were in sharp decline. Andrew Leigh titled his 2010 study of social capital *Disconnected*, and documented the erosion of social connections in Australia. By 2004 the number of Australians who were active members of an organization had fallen from 33 to 18 percent. Numbers of adults going to religious services at least once a week dropped from 35 percent to 13 percent by 2007. Union membership declined to less than 20 percent of workers. Use of public amenities also was dropping. Museum-going declined 8 percent from levels in the early 1990s. Informal relationships were weaker. Leigh, using a “friendship scale,” surveyed large numbers of Australians and compared the 1980s with the 2000s. The typical Australian had two fewer friends that they could trust. Leigh also suggested a connection between these changes and the digital revolution. Internet “Friends,” he remarked, were replacing actual “friends.” “You may have hundreds of Facebook Friends, but how many would come to visit you in hospital?”¹⁹

There is an extensive debate about roles the digital revolution may play in erosion of social capital. Putnam himself argued that television enticed people out of the public square and into the private spaces of their homes. Leigh pointed to another example – ATM machines were replacing bank clerks. He might have given others. Human connections to local bakers and butchers, which he cited as examples of social capital in post-war Australia, had significantly weakened by 2015, as chain stores and on-line shopping shut down local businesses or shifted focus from neighborliness to scale and efficiency.

Evidence is mixed about whether social connections created by the digital revolution outweigh the costs. Old people often feel more connected to families and friends through social media. And there are many examples of how social media can lead people to connections face to face. These include the famous Obama presidential campaign of 2008, which generated high levels of youth and student involvement by intentionally connecting online to offline effort. The campaign incorporated elements of civic agency which Obama had learned in community organizing, teaching respect for people supporting his opponent.²⁰

Yet loneliness has become acute among young people and others.²¹ The UK Mental Health Foundation found that loneliness was a greater concern among young people than the elderly and cited evidence that social media is a culprit. “The 18 to 34-year-olds surveyed were more likely to feel lonely often, to worry about feeling

17) Leigh, “Connected Communities.” See also Wikipedia, “Andrew Leigh.”

18) Wikipedia, “Australian Youth Affairs Coalition.”

19) Leigh, *Disconnected*.

20) For a treatment of the civic agency dimensions of social media in the campaign, see Graeff, “Evaluating Civic Technology Design.” See also Boyte, “Civic Agency and the Cult of the Expert.”

21) Khullar, “How Social Isolation Is Killing Us.” See also Ninivaggi, “Loneliness: A New Epidemic in the USA,” and John, “How the World’s First Loneliness Minister Will Tackle ‘the Sad Reality of Modern Life’.”

alone and to feel depressed because of loneliness than the over-55s.”²² In the US, an extensive study by San Diego State University psychology professor, Jean Twenge, found growing loneliness which she tied to replacement of face-to-face relationships with online activity. When compared to teenagers in earlier decades, Gen Z are less likely to “get together with friends in person, go to parties, go out with friends, date, ride in cars for fun, go to shopping malls, or go to the movies,” she reported.²³

Though it does not explicitly tie loneliness to social media use, a report on youth loneliness by Swinburne University documents growing loneliness and social isolation and associated health risks including anxiety and depression among young people in Victoria. More than half of the participants in the study report feeling lonely sometimes or always. Forty seven percent said they sometimes or always feel they have no one to turn to.²⁴

Overall, the internet is replacing many face-to-face relationships with digital relationships. AI is a significant factor in driving the process because social listening techniques that amass an enormous amount of data on people’s personal interests and needs are used to entice people to online activities like Facebook through targeted appeals. There is also evidence that more time online on social platforms like Facebook leads young people to curate their public identities and become more fearful of person-to-person interaction.²⁵

For years, some youth workers and policy makers have voiced concern that isolated young people who spend a great deal of time online are also vulnerable to inflammatory and even extremist online messaging that communicates an “us-versus-them” mindset appealing to a need for belonging. After several UNESCO conferences on related topics, the UNESCO study in 2017, *Youth and Violent Extremism on Social Media: Mapping the Research*, reported on extensive research across continents. Séraphin Alva, Divina Frau-Meigs, and Ghayda Hassan, its authors, draw balanced conclusions about the need to protect rights to free speech on the internet, “at the same time as identifying and responding appropriately to expressions that are put to the service of violent extremism.”²⁶ The report also shows how social media can contribute to political and civic polarization, not only during elections but also throughout civic life. It describes the process of “rupture in democratic dialogue and in citizenship engagement,” highlighting how “ideological, indoctrinating, collective discourses are constructed where ‘others’ are portrayed as radically different from ‘us.’” Meanwhile, the “us” group is “then construed as abused, under threat, [and] victims in need to be defended while the ‘other’ is dehumanized (e.g., constructed as ‘evil’).” The process justifies blaming, “exclusion, persecution and possible violence.”²⁷

22) Gil, “Loneliness.”

23) O’Connell, “Teens aren’t socializing in the real world.” Her in-depth article discusses a number of other studies as well.

24) Swinburne University of Technology, “Loneliness and social.”

25) In a detailed study of effects of the internet on young people’s connectedness Jennifer L. Cline reported results of a series of focus groups and individual interviews she did with college students which illustrate this dynamic. She asked young adults if they preferred social media or face-to-face communications. Almost everyone said they preferred face-to-face connection, but they also expressed a good deal of anxiety about how to engage others face to face – and saw social media as the easy and convenient way out. “These young adults acknowledged wishing they felt more competent when relating to others face-to-face,” Cline says. “Unfortunately being ‘out of practice’ created a vicious cycle in which lack of social competence led to greater dependence on social media use which led to even more interpersonal awkwardness.” Extensive social media use led to curating one’s self-presentation, and in turn to feelings of greater vulnerability. Such self-curation also feeds “an increase in internal incongruence because they know that their real selves, the selves they actually know and experience, are different from the idealized selves they present.” Looking at others’ posts and comparing the idealized self-presentations to themselves results in a diminished sense of personhood. These dynamics create an anonymous on-line culture, in which “users post things ... that they would never say in real life ... aggressive comments, rude insults, and aggressive opinions.” See Cline, “Losing Face.”

26) Alva et al., *Youth and Violent Extremism on Social Media*, 2.

27) *Ibid.*, 11–12.

The report describes how the us-versus-them way of thinking is fed by “manipulation of young people’s need for ‘extimacy’ (virtual meetings, virtual dating) to develop new social networks and new affiliations through intimate virtual encounters and group discussion.” There is evidence that “in online actions the influence of affective affiliation with the ingroup may be even more pronounced than offline.”²⁸

An extreme example of how vulnerable young people can be enlisted in violence was the Christchurch shootings in New Zealand on March 15, 2019. A 28-year-old man from New South Wales, Brenton Harrison Tarrant, attacked a mosque. The attack left 51 people dead and 49 injured and soon inspired copycat attacks in San Diego and Poway, California, El Paso Texas, and Bærum in Norway. Tarrant was an avid online consumer of hate videos about Muslims’ supposed “threats to the west” and himself a producer of videos advocating violence against Muslims.²⁹

Digital platforms can spread us-versus-them narratives which affect huge numbers of people with AI algorithms driving the process. Max Fisher and Amanda Taub, in a report for the *New York Times* published after the election of Jair Bolsonaro as president of Brazil in October 2018, documented the ways “YouTube’s search and recommendation system appears to have systematically diverted users to far-right and conspiracy channels in Brazil.” Designed to maximize watch-time, YouTube uses algorithms to link videos with similar content. The company disavows any political ideology or bias, but media videos appealing to emotions of fear, doubt, and anger are especially enticing, and common in videos based on conspiracy theories and right-wing extremism. In Brazil, not only politicians but also health workers, women’s rights activists, and environmentalists became targets of smear campaigns. “As the far right rose, many of its leading voices learned to weaponize the conspiracy videos, offering ... people to blame.” Debora Dinz, a women’s rights activist who fled Brazil following online attacks, called the result “an ecosystem of hate.”³⁰

Civic Agency

Although democratic elections in Australia may be less compromised than in many other places, the country cannot escape the contagion of extremism, social isolation, and us-versus-them messaging. Schools have a crucial role to play in responding.

An important study on civic development among adolescents introduces the helpful concept of civic purpose defined as “a sustained intention to contribute to the world beyond the self through civic or political action.”³¹ The authors emphasize adolescence as the developmental stage when the exploration of purpose begins, although it can continue throughout adulthood. If civic purpose is nurtured during adolescence, it provides a strong motivational foundation on which young people can build their futures and organize their lives. Civic purpose shifts the focus of an individual’s life goals beyond a narrow focus on the self toward the common good, while also providing a source of personal meaning. According to the study, in order for young people to realize their civic purpose, “they need to develop a sense of themselves as effective civic agents with the responsibility and capacity to cause change in their communities, in society and in the world.”³²

Civic agency is a concept that refers to the capacity of diverse people to self-organize to effect change, solve problems, create common resources, and build a shared democratic way of life. With roots in societies

28) Ibid., 17–18.

29) Wikipedia, “Christchurch Mosque Shootings.”

30) Fisher and Taub, “How YouTube Radicalized Brazil.”

31) Malin, Ballard, and Damon, “Civic Purpose,” 109.

32) Ibid., 110.

across the world, the concept has been further developed by the Center for Democracy and Citizenship at the University of Minnesota, the Institute for Democracy in South Africa, and the Public Work Academy at Augsburg University, through partnerships in the US and other countries.³³

Educational approaches based on civic agency develop effective agents of change by giving sustained and careful attention to the skills, habits, and philosophical and ethical foundations involved in civic action and generating civic purpose. Civic agency also transforms understandings of democracy, from government at the center to citizens at the center. It shifts identities of citizens from voters and volunteers to co-creators. In a civic agency approach, young people see themselves as co-creators who are citizens today, not citizens in waiting. Finally, a civic agency lens illuminates sites for generating bridging social capital beyond the voluntary sector to include work in institutions like schools, businesses, libraries, cultural and faith organizations, and government agencies. A comparison of different paradigms or models of democracy clarifies the key shifts in thinking involved.

Democracy paradigms

Frameworks	Government-centered	Community-centered	Work-centered, public work
What is democracy	Free elections	Civil society	Way of life built by public work that generates civic agency
Citizen	Voter	Volunteer	Co-creator
Citizenship	Voting	Community service < Deliberation >	Public work
Politics	Who gets what?	Search for unity	Nonviolent work across differences to make a common life
Power	Power over	Power with	Power to, civic agency

Government-centered

The government-centered view of democracy focused on elections is today’s conventional wisdom. The official site of the United States Agency of International Development propagates this concept of democracy around the world: “Democracy refers to a civilian political system in which the legislative and chief executive offices are filled through regular competitive elections with universal suffrage.”³⁴ Government-centered definitions of democracy also inform the main currents of academic literature, such as the prestigious report of the American Political Science Association’s Task Force on Inequality and American Democracy. Reviewing a large quantity of research, its report, “American Democracy in an Age of Rising Inequality,” drew stark conclusions about widening inequality and declining public voice in government of middle and low income citizens.³⁵ But the report also defined democracy as a constellation of government-centered activities. Its list of “political activities” includes “making financial contributions to candidates, working in electoral campaigns, contacting public officials, getting involved in organizations that take political stands, and demonstrating for or against political

33) See, for instance, Boyte, “Civic Agency and the Cult of the Expert;” Boyte, “Civic Agency” in *Encyclopedia of American Governance*; Boyte, “Civil Society and Public Work;” and Ström, *Citizens at the Centre – AIDS Councils as Catalysts for Unlocking Citizen Power*.

34) USAID, *AID Strategy on Democracy, Human Rights and Governance*, 37.

35) Jacobs et al., “American Democracy in an Age of Rising Inequality,” 651–66.

causes.”³⁶ All are important, since government is a crucial resource for democracy. But a state-centered view makes politicians the main actors and neglects social capital as key to respect for human rights and democracy’s flourishing.

Community-centered

The second prominent framework of democracy, arising in response to the limits and shortcomings of the first, comes from the school of political theory called communitarianism (or civil society), one of whose signal conceptual advances has been social capital. Among its many achievements, it has revived concern with the ethical and moral foundations of citizenship and the everyday experiences which build and sustain civic culture. Over the last generation it has sought to strengthen the community service movement as well as emphasize voluntarism. Service and voluntarism have drawn attention to social relationships and civic responsibility, challenging radical individualism and a “me first” culture. These are great strengths. But communitarianism neglects the civic possibilities of work and attention to dynamics of power and politics in everyday life.

Public Work

Citizenship theory, dating to the Greeks, generally locates civic activities outside the world of work. As the political theorist Judith Shklar put it, Greek philosophers saw “productive and commercial work as so deeply degrading that it made a man unfit for citizenship.”³⁷ Most citizenship theory has followed suit, emphasizing civil society as the site of social capital and contrasting civically-oriented voluntarism with work and government.³⁸

Real world experiences differ from the academic theory, highlighting the importance of cooperative work with public purposes, or public work, to the task of community-building. Traditions of public work can be found in many cultures, creating the basis of a normative ideal of citizenship that predates the rise of modern states. Public work is collective, self-directed work across differences that solves public problems and creates public goods. Such public work bridges divisions of status, income, and other differences for the sake of community benefit and is thus a generator of bridging capital.³⁹ Settlers in the United States, Australia, and other immigrant societies who cleared lands, built towns and villages, wells, meeting halls, and roads all were engaged in public work. They often displayed prejudice toward indigenous populations, leaving legacies of exclusion and discrimination that must be addressed, but also learned productive roles and civic identities. As David Mathews, president of the Kettering Foundation, which focuses on what makes democracy work, has put it, “Settlers on the frontier had to be producers, not just consumers. They had to join forces to build forts, roads, and libraries. They also established the first public schools. Their efforts were examples of ‘public work,’ meaning work done by not just for the public.”⁴⁰ In Australia, communal labor, called “working bees,” took many forms, from clearing fields and building town houses to quilting bees. The term continues to be widely used.⁴¹

We have found that these public work traditions and practices also illuminate new public possibilities of diverse occupations in institutions such as schools. When public work is translated into schools and colleges, it

36) Ibid., 256.

37) Shklar, *American Citizenship*, 68.

38) Boyte, *Everyday Politics*.

39) Boyte, “Constructive Politics as Public Work,” 630–60.

40) Mathews, *Reclaiming Public Education by Reclaiming Our Democracy*, vii.

41) See ABC News Australia, “Brisbane working bee hits streets;” a story of a community joining together to respond to a flood.

can be a powerful motivator for students who want to feel they are making productive contributions to their environments. It also can enrich the professional practices and identities of teachers, adding public, collaborative, and purposeful elements to their efforts and greatly expanding their capacities to respond to the dangers of AI.

We turn to the question of how schools can more effectively develop civic purpose and civic agency among young people and their community partners.

Three Approaches to Democracy Education

Education for democracy and citizenship (or civic education) has evolved over the last four decades beyond traditional “civics” to include more action-oriented, experiential approaches, often conveyed by the term “civic engagement.” These approaches reflect the evolutions in democracy theory outlined in the chart above, and can be clarified as follows:

Frameworks	Civics (government centered)	Ethics (community-centered)	Public work (work-centered)
Educational goal	Civic knowledge	Civic values	Civic agency
Democracy education	Civics	Service learning; Deliberation	Collective action; Public work
Educator	Instructor	Moral guide	Citizen teacher

In the “civics” framework, the chief goal of civic education is to convey information about how democracy works and how citizens can exercise their democratic rights. While this foundational knowledge remains useful, the challenges of an AI world also draw attention to the need for deeper approaches that enable young people to develop civic values, integrate them so that they are a core motivation throughout their lives, and feel ownership and agency in democratic society. The ethics approach emphasizes ethical frameworks, values and democratic culture, while public work theory adds civic agency – the capacity for effective action in plural societies and a complex world. The three approaches to democracy education are elaborated below.

Civics

Traditional information-based civic education – “civics” – fits into the view of the teacher that Biesta decried: a subject specialist committed to achieving “measurable learning outcomes,” usually captured by standardized test scores. As futurists point out, the teacher understood in this way will become obsolete in an AI world, with an ever-increasing amount of information on any subject available to students around the clock via ever more sophisticated technology including robotic teachers. Nevertheless, democratic educators – whether specialists in civic education or any other subject – still have crucial informational roles, teaching multi-dimensional media and information literacy as well as analytical skills to help students understand where information comes from, how it is used, by whom, and for what purposes. This emphasis on media and information literacy is already well established in many schools. More conscientious attention to civic imperatives for media literacy will enhance the relevance of this work.

Curriculum statements in school systems often rhetorically include the aim of educating young people to be citizens, but the “civic” dimension of education is usually understood narrowly, with the primary emphasis on elections, the machinery of government, and the rights of citizens. It conveys a state-centered understanding

of democracy, as explained above. When democracy education as civics is treated as a discrete, compulsory subject, it is notoriously unpopular among students. When efforts are made to mainstream civic education across the curriculum, it tends to disappear, with teachers feeling ill-equipped to convey relevant information and unmotivated to do so in the rush to cover other subject matter.

In an AI world, the informational aspect of democracy education requires a reorientation of the teacher. The classroom needs to become a space where students learn to deal with aspects of an information-saturated world that are damaging to democracy such as *kompromat* (malicious disinformation campaigns) and us-versus-them thinking that increasingly pervades not only formal politics but civic and public life in general.

The sorting of information by intelligent machines intensifies people's existing biases, facilitates tunnel vision, allows invisible forces to inflame hatreds, and leads people into information bubbles that reinforce the "correctness" of their own views. In addition to the spread of fabricated written stories, disinformation campaigns are beginning to include so-called "deep-fakes," or fake video and audio material created using AI techniques that make it all but impossible to detect whether or not it is authentic. In a recent article in *Scientific American*, Martijn Rasser writes that "the visceral immediacy of voice and image give deep-fakes unprecedented impact and authority." He adds, "It is the human factor – weaknesses in our human psychology – not their technical sophistication that make deep-fakes so effective." Rasser goes on to argue the need for cognitive psychology to be included in the compulsory curriculum of every school, particularly at the secondary level, so that students can learn to understand mechanisms of cognitive bias and become adept at questioning their assumptions. To avoid falling into the trap of believing falsified videos, a student needs to learn about human tendencies to believe things we want to be true (desirability bias) or confirm what we already believe to be true (confirmation bias).⁴²

Learning skills and habits to question and discern the veracity of information goes some way toward helping students navigate a world increasingly riddled with deception. However, dealing with such deception *individually* is not enough and can lead to a heightened sense of isolation and powerlessness. This is what makes *collective* – or civic – agency urgent, something that, we argue, needs to become a primary focus of education for democracy.

Ethics

Community-minded educators as well as those involved in areas such as human rights education and religious education have drawn attention to the importance of ethics and values education. This is a crucial dimension of education for democracy, where an emphasis on civic values needs to include justice, equality and liberty, as well as appreciation of diversity and recognition of the potential contribution of every citizen to building a common life. In an AI world, values education must include a critical dimension, enabling learners to interrogate value assumptions usually implicit but always present in technological systems that purport to be value-free. Educators committed to formation in civic values also teach collaborative, deliberative, community-oriented practices based on respect for others. Values are shaped more effectively by modelling and acting than by exhortation. Furthermore, as the writers of the article on civic purpose point out, democracy is "sustained by *collective* identification with democratic values ... which are upheld not only for the self but for the *common good*."⁴³ Education for democracy requires not only ethical individuals but also the development of a democratic *culture*, built, sustained, and celebrated by whole communities.

42) Rasser, "Why Are Deepfakes So Effective?"

43) Malin et. al., "Civic Purpose," 109; italics added.

The distancing dynamics of social media can make people both more fearful of relating to others beyond their group and also inured to the harm they cause to others by aggressive online behavior. While today AI assists with targeting recipients for hate-generating material, it generally fails at assisting with moderation of hateful online interactions. Developing norms for humane, ethical communication, and capacity to live in a plural society requires the formative, values-oriented goals of education to be taken much more seriously. A key part of this education, we believe, is renewal of the traditions of nonviolence understood as a philosophy of everyday interaction.

Nonviolent philosophy

In recent decades, nonviolence has played an important role in legitimizing protest movements around the world, but rather than a philosophy of everyday interaction, it has mostly been understood as an effective tactic. An example in Australia is the successful movement to prevent damming of the Franklin River.⁴⁴

The nonviolence of the Indian independence movement and the American civil rights movement added philosophical dimensions to tactical nonviolence that have renewed relevance in a time of intensifying polarization and “us-versus-them” narratives. For instance, hundreds of grassroots citizenship schools across the American South in the civil rights movement combined pedagogical approaches focused on developing individual and collective agency with a cross-partisan nonviolent politics that involved skills of working across differences – even, occasionally, with poor whites who supported segregation.⁴⁵ Such politics was full of tension and conflict but also infused with nonviolence as a practical philosophy of everyday life involving spiritual, moral and psychological disciplines that refuse to *demonize or hate* even the bitterest of opponents or see them in reductionist terms. “Hate... corrodes the personality and eats away at its vital unity,” Martin Luther King wrote. “The nonviolent approach ... gives [people] new self-respect. It calls up resources of strength and courage they did not know they had.”⁴⁶

King’s espousal of nonviolence aimed not only at overcoming the oppressive system of segregation, but also at building inclusive, egalitarian communities *after* segregation. Nonviolence in the Indian independence movement had similar qualities as scholars such as Karuna Mantena and Ajay Skaria have detailed.⁴⁷ This view of nonviolence is reappearing. As the African American philosopher Danielle Allen describes, nonviolence has resources for “positive freedom,” not simply “negative freedom,” or fights against oppression. For instance, it can address conflicts like micro-aggression in ways that teach respect and develop relationships rather than inflame divisions.⁴⁸

Deliberation

Public deliberation is a citizenship practice in government-centered and work-centered as well as community-centered models of democracy. From an ethics perspective, it addresses the challenge of fear-mongering

44) Connors and Hutton, “Mass Nonviolent Protest, Australia.”

45) Harry Boyte taught in the citizenship schools as a young man. Though she neglects the nonviolence that was part of the curriculum, Katherine Charron; see *Freedom’s Teacher*; provides an extensive and helpful treatment of the citizenship school movement and its background in Clark’s remarkable history as a teacher and organizer in segregated schools.

46) Boyte, *Awakening Democracy through Public Work*, 21.

47) Mantena, “Another Realism,” 455–470; Skaria, “Thinking with Gandhi.”

48) Allen, “Integration, Freedom, and the Affirmation of Life,” 146–160.

and hardening of positions around controversial issues and teaches values of critical judgment and respect for different views. It has gained growing recognition and popularity, particularly in the United States, in the past few decades. It provides a way to become informed about different viewpoints and come to deeper understanding of complex issues through structured and moderated face-to-face discussion. Using public deliberation in a classroom setting has proven to be a powerful tool for democracy education. In *Classrooms That Deliberate*, author Stacie Molnar-Main explains that when students engage in deliberative discussions, “[they] consider different perspectives on a social problem, identify and work through tensions related to different approaches to addressing the problem, and attempt to arrive at reasoned judgment together.” Molnar-Main states that the aim is not to reach consensus or complete agreement among those who participate in the deliberative process. Rather, she clarifies, “The broad goals, among other curricular goals, are to promote improved understanding of the issue, awareness of the consequences of various responses, and recognition of commonly held values that can inform future action.”⁴⁹ Deliberation provides a way to bridge divides and promote engagement in community problem-solving.

In a world in which it is easy to believe that all the information one needs (and more) can be obtained online and via robotic assistants, deliberative processes draw people back into the presence of others and slow them down to listen, learn and assess options together. This capacity to encounter and acknowledge a plurality of views, including unpopular views or those held by marginalized groups, is essential to democracy. It is also essential to overcoming isolation and building strong communities in an AI world. The assumption that analysis based on big data provides the best solutions ignores the enduring human complexity and value issues that cannot be circumvented by smart machines. Fostering critical thinking, a common goal in today’s classroom, is generally understood to be about teaching students to think for *themselves*. Democracy requires of us that we think *together* and find common ground for action. Indeed, an emphasis on action points beyond the cultivation of openness, flexibility and other such values to change-making skills discussed in the next section. As background it is useful first to consider another key approach to civic education with explicitly formative goals.

Service learning

Since the late 1980s, service learning has spread widely, valued as a strategy to promote civic responsibility and prosocial behavior among young people.⁵⁰ By exposing students to needs in the community and to the work of organizations striving to address those needs; ranging widely from problems of hunger, homelessness and racial bigotry, to pollution, inhumane treatment of animals, and much more; they become more outward-looking, develop empathy, and learn how to contribute to the well-being of others. These experiences can help to humanize a society of growing individualism, isolation, and polarization exacerbated by AI. However, from the point of view of civic agency, there are significant shortcomings to service learning.

First, a “savior complex” characterizes many service-learning initiatives, even if unwittingly. Although students and teachers become involved with good intentions, the helping posture can disguise top-down power relationships and perpetuate a deficit view of people in need as hapless and deficient, unable to contribute to their own growth and to society. While instilling a service ethic in young people highlights the idea that citizens are not only rights-holders but also have responsibilities, the logic of individual responsibility is too narrow. All too often service leaves volunteers feeling hopeless, if slightly heartened at a personal level, in the face of

49) Molnar-Main, *Classrooms that Deliberate*, 16.

50) On service learning’s impact see Colby, et al., *Educating for Democracy*; on the spread of the concept of “Prosocial” grounded in the integration of Cultural Evolution science and Civic Studies, see Wilson et al., “Generalizing the Core Design Principles,” S21–S32.

seemingly intractable social problems. What needs to be cultivated is a strong sense of collective agency – the capacity to act effectively with others to address deeper issues.

Public Work

Democracy education that focuses on public work and civic agency integrates knowledge of public processes like elections and values education into practical, productive work in the world with public impact. It equips students with skills, habits and dispositions to become agents of change in their schools and communities in ways that will enable them to exercise civic muscle as adults as well. Some approaches to public deliberation emphasize the importance of moving to action and thus do lead toward the exercise of collective agency for the common good. Service learning initiatives that give significant responsibility to students themselves to design interventions and negotiate relationships with partners can foster civic agency too.⁵¹ However, the overriding emphasis on altruism in service learning remains an impediment to real empowerment. Civic empowerment, or civic agency, requires that students learn how to engage others around concrete interests – whether altruistic or not – and how to navigate the complex power dynamics of any setting, while building power with others who are different. Willingness to act is a necessary precursor to action but does not equate with the *capacity to act*. Collective action in community settings entails unavoidable tensions. Simply put, the work of coming together across lines of difference (whether those of gender, race, class, age, faith, or other divisions) is intrinsically *political* in the broader and nonviolent sense of the word. It involves negotiation and acknowledgement of different interests, balancing of power relationships, savvy reading of environments and other such skills that help to ensure effective action.

The youth civic empowerment initiative Public Achievement is an example of an approach to democracy education that focuses on developing capacities for effective face-to-face collective action.⁵² It is recognized as a model for what has become known as “action civics” and has been adapted in over twenty countries in Europe, Africa and Asia. Many initiatives in the US have built on it, including the citizenship curriculum of the Clinton administration national service project, AmeriCorps in the 1990s, and “Public Adventures,” the citizenship curriculum of 4-H, an international youth initiative in many countries, including partnerships in Australia.⁵³

Public Achievement differs from conventional service learning approaches in its focus on developing broad everyday political skills and civic agency. Rather than slotting students into volunteer roles already prescribed by service programs, young people identify the issue they wish to tackle and design their own strategies for doing so. They implement their strategies with the guidance of coaches. Every step along the way, they collectively evaluate their successes, failures and lessons learned.

Public Achievement teams are coached by more experienced adults, usually teachers or university students. The coach’s role is to help equip the students to take action, not to act on their behalf. The coach assists them to figure out where to find relevant information, prepare for nerve-wracking interactions (a phone call to request a meeting with a public official, for example, or an interview with said official), help them to deal with disagree-

51) This would be true of most service activities in the United World College network where the International Baccalaureate originated. It is likely that service learning has reverted to more typical, altruistic approaches in many schools that have adopted the IB curriculum, although we cannot speak to this with authority.

52) Public Achievement was founded in 1990 by Harry Boyte in partnership with Jim Scheibel, mayor of Saint Paul, and colleagues in the Twin Cities. It was based on Boyte’s experiences in the civil rights movement which convinced him of the capacity of young people to be agents of change. It gained depth and power as an example through St. Bernard’s elementary school in St. Paul, a site where the principal, Dennis Donovan, made it central to the school culture.

53) 4-h.org, “Citizenship.”

ments, and guide them as they evaluate their efforts and hold each accountable. As students work on a Public Achievement project, the coach's job is also to introduce core concepts – different ways of thinking about politics, citizenship, power, and democracy. As such, the Public Achievement approach strives to promote the theoretical paradigm shift presented in the chart above, moving from democracy as something we elect other people to do for us, or voluntary after-hours community service, to democracy as the foundation for everyday life and for work in every setting. The rigorous conceptual framework for Public Achievement sets it apart from service-based approaches to democracy education.

Core concepts

The core concepts in Public Achievement are drawn from the philosophy of public work and its distinctive understanding of democracy and citizenship summarized in the chart above.⁵⁴

- *Public work* is cooperative work by a diverse group to solve a common problem or create a common resource.
- *Politics* is not the sole preserve of politicians and political parties. It is about negotiating a path beyond violence or hatred with others who have very different views and interests.
- *Power* is the capacity to act collectively. It is not zero-sum and can be built over time, even in situations where people experience deep feelings of powerlessness.
- The citizen is a *co-creator* of communities, schools, and a good society. Children and new immigrants to a community can be civic co-creators.
- *Self-interest* (as opposed to altruism or selfishness) is a crucial motivator, the unique passion that sustains a person's commitment to an issue. It is a powerful wellspring of civic action when it is aligned with the interests of others and oriented toward the common good.
- Distinguishing between *public and private* worlds is a useful way to determine appropriate behaviors in different settings, navigate relationships, and deal with tensions in public life.
- Holding in tension the *world as it is* and the *world as it should be* enables people to work toward a better future while dealing strategically with the politics of the real world.
- *Free spaces* are sites, different from "safe spaces," where people develop civic agency through interaction across differences and self-organized public work.
- *Mutual accountability* is the capacity to hold each other (not only public officials) true to shared commitments, supporting and empowering each other along the way.

The concept of free spaces creates the open-ended quality of Public Achievement and its adaptations. This improvisational quality also creates challenges. As a University of Minnesota team which evaluated Public Achievement for the Kauffman Foundation put it, "Innovative philosophies and practices [like Public Achievement] which do not fit the classroom or 'program' model rub against everyday practices, rules, procedures, policies, individual preferences and whims." For all the challenges, the team found striking results. In the fourth evaluation year they interviewed 282 youth participants, 204 coaches, 25 teachers, 24 principals, and others in seven schools in Missouri and Kansas. "That it is not fully invisible, submerged, twisted out of its shape or sabotaged is a testament to its inherent soundness and to the vitality it invites in its advocates and leaders," they said. "We found that young people experienced PA as a place where they were efficacious, had a voice, became skillful,

54) These concepts are described in Hildreth et. al. "Building Worlds, Changing Lives, Making History;" the concepts of civic agency are also detailed in Boyte, *The Citizen Solution*, with chapters illustrating various concepts and their expression in skills.

did meaningful work, and learned.” For almost all, it provided “an invitation and an opportunity... to expand their everyday, small, and private worlds” and to contribute to school and community.⁵⁵

An important recent article by AI scientists and leaders in *Scientific American*, asks the question, in its title, “Can Democracy Survive Big Data and AI?” One key to answering the question in the affirmative is what can be called pluralist epistemology. As they put it, “for collective [human] intelligence to work, information searches and decision-making by individuals must occur independently. If our judgments and decisions are predetermined by algorithms ... this truly leads to a brainwashing of the people.” Diversity is essential. “Pluralism and participation are not ... concessions to citizens but functional prerequisites for thriving societies.”⁵⁶ Public Achievement, as other examples of civic agency, are based on unscripted work, free improvisation, and continuous interplay between different views and interests. They embody pluralist epistemology, which can also be described as bridging social capital.

Citizen Teachers

Adults seldom fail to be inspired by young people’s Public Achievement projects. At the same time, it is too easy to treat Public Achievement as a youth program, without taking seriously the possibilities – indeed, the need – for broader application of the concepts and skills that it teaches. Public Achievement and the other programs that closely resemble it are vehicles for developing civic agency. It is important for teachers in schools that offer such programs to take up the challenge of themselves becoming effective agents of change in the community as well as in their own institutions. Public Achievement has been shown to be most effective in schools that adopt its philosophy in every aspect of school life. This requires that the question of agency and shared responsibility become central to addressing all issues that arise whether in the classroom, on the playground, in the staff room, or within the school as a whole. For this to happen, teachers need to see themselves as citizen professionals, citizen teachers.

The concept of citizen professional is an outgrowth of public work, expressed through many different professions and occupations. In addition to teachers, it has come to life among nurses, civil servants, bankers, police, therapists, city managers, scientists and others as they strive to turn their work sites into more respectful and empowering environments, filled with civic purpose, and aimed at unleashing diverse talents and energies for joint problem solving and civic contribution of all those with whom they work. In a world where people often feel pushed around in their workplaces and powerless in the face of problems that beset the broader society, learning to develop civic agency is both urgent and difficult. Identifying and analyzing problems is one thing; figuring out how to tackle them in ways that involve and empower all those affected is quite another. It demands serious effort to push back against the efficiency logic that pressures institutions to address problems in a top-down, technocratic fashion and become narrow in their outcomes, as Biesta observed for schools. In an AI world, these pressures will only become more intense. Taking seriously the need to develop civic agency to counter the dangers of AI puts questions of empowerment and democracy at the center. Focusing on democracy as a way of life, in the broadest sense of developing inclusive, empowered communities centered around public work, requires a reorientation of all professionals toward civic purpose and civic agency.

Within the school setting, the citizen teacher develops the broad political skills to negotiate with colleagues and figure out ways to solve problems of common concern. Especially when feeling constrained by policies “from above,” the citizen teacher works with others to understand the politics of the situation and to create room to

55) Roholt, Hildreth, and Baizerman, “Year Four Evaluation of Public Achievement,” 3, 12, 5, 6.

56) Helbing, et al., “Will Democracy Survive Big Data?”

manoeuvre. Citizen teachers learn not to complain, but to organize (in the broad political sense of the word). They work to create and sustain free space in schools. They build alliances with parents, community organizations, businesses and other employers to support the work of the school and its students. In other words, they are themselves civic agents of change, with skills that are important not only for sustaining initiatives like Public Achievement but for the larger task of deepening the engagement of schools with communities. The idea of the citizen teacher presents a new direction for teacher training and ongoing professional development.

Civic Agency and a New Educational Settlement

The public work approach to democracy education can be adapted to university settings including academic disciplines, extracurricular activities and professional education. In 2009 the Center for Democracy and Citizenship developed a national “Civic Agency” initiative with a group of colleges and universities called the American Democracy Project, part of the American Association of State Colleges and Universities (AASCU), the association which includes most teacher education programs in America. This proved to be a very successful way to introduce Public Achievement and its adaptations in communities. With this work in mind, Felice Nudelman, Executive Director of the American Democracy Project (ADP) and former Director of the Educational Division of the *New York Times*, has invited the Public Work Academy, an educational initiative we co-founded to spread civic agency and public work methods, concepts, and practical lessons, to work with ADP to develop a new Citizen Professional effort. It envisions much deeper relationships among colleges and local employers and communities, including schools, new models of professional work with civic purpose in local communities, and a revitalization of cultures of civic agency that can meet the challenges of an AI world and, more, play a driving role in democratic vitalization.

Citizen teachers, working in and with communities, will be crucial to this process.

Bibliography:

- 4-h. "Citizenship." Accessed: April 18, 2020. <https://4-h.org/parents/curriculum/citizenship/>
- ABC News. "Brisbane working bee hits streets." last updated January 15, 2011. <https://www.abc.net.au/news/2011-01-15/brisbane-working-bee-hits-streets/1906214?pfmredir=sm>.
- Allen, Danielle. "Integration, Freedom, and the Affirmation of Life." in *To Shape a New World: Essays on the Political Philosophy of Martin Luther King, Jr.* Edited by Tommie Shelby and Brandon M. Terry. Cambridge: Harvard University Press, 2018. <https://doi.org/10.4159/9780674919860-008>.
- Barnwell, Paul. "Are Teachers Becoming Obsolete?" *The Atlantic*, February 15, 2017. www.theatlantic.com/education/archive/2017/02/becoming-obsolete/516732/.
- Biesta, Gert. "What Kind of Society Does the School Need? On Democracy and Education in Impatient Times." *Studies in Philosophy and Education* 38, (2019): 657–668. <https://doi.org/10.1007/s11217-019-09675-y>.
- Boyte, Harry C. *Awakening Democracy through Public Work: Pedagogies of Empowerment*, 38–52. Nashville: Vanderbilt University Press, 2018.
- . *The Citizen Solution: How You Can Make a Difference* St. Paul: Minnesota Historical Society Press, 2008.
- . "Civic Agency and the Cult of the Expert." *Kettering Foundation*. Dayton: Kettering Foundation Press, 2009.
- . "Civil Society and Public Work" in *Handbook of Civil Society*. Edited by Michael Edwards. Oxford: Oxford University Press, 2011. https://www.researchgate.net/publication/292029496_Civil_Society_and_Public_Work
- . "Civic Agency." In *Encyclopedia of American Governance*. MacMillan, 2015.
- . "Constructive Politics as Public Work." *Political Theory* 39, no. 5 (2011): 630–60. <https://doi.org/10.1177/0090591711413747>.
- . *Everyday Politics: Reconnecting Citizens and Public Life*. Philadelphia: University of Pennsylvania, 2004. <https://doi.org/10.9783/9780812204216>.
- . "John Dewey and Citizen Politics: How Democracy Can Survive Artificial Intelligence and the 'Gospel of Efficiency.'" *Education and Culture* 33, No. 6 (2017): 10–44. <https://doi.org/10.5703/educationculture.33.2.0013>.
- . "Reframing Democracy: Governance, Civic Agency, and Politics." *Public Administration Review* 65, No. 5 (2005): 536–546. <https://doi.org/10.1111/j.1540-6210.2005.00481.x>.
- Brooks, David. "The Crisis of Western Civ," *New York Times*, April 21, 2017.
- Charron, Katherine. *Freedom's Teacher: The Life of Septima Clark*. Chapel Hill: UNC Press, 2009.
- Cline, Jennifer L. "Losing Face: How Facebook Disconnects Us." *Counseling Today*. August 26, 2014. <http://ct.counseling.org/2014/08/losing-face-how-facebook-disconnects-us/>.
- Colby, Anne., Elisabeth Beaumont, Thomas Ehrlich, and Josh Corngold. *Educating for Democracy: Preparing Undergraduates for Responsible Political Engagement*. Palo Alto: Carnegie Foundation for the Advancement of Teaching, 2007.
- Connors, Libby and Drew Hutton. "Mass Nonviolent Protest, Australia." *Encyclopedia of Political Communication*. Melbourne: Sage Publications, 2008.

- Farr, James. "The Secret History of Social Capital." paper presented in the Department of Political Science, University of Minnesota, April, 2002.
- Fisher, Max, and Amanda Taub. "How YouTube Radicalized Brazil." *New York Times*, August 11, 2019.
- Freeman, Samuel. "The Headquarters of Neo-Marxism." Review of *Grand Hotel Abyss: The Lives of the Frankfurt School* by Stuart Jeffries; *Habermas: A Biography* by Stefan Müller-Doohm, trans. By Daniel Steuer; & *Adorno and Existence* by Peter E. Gordon. *New York Review of Books*, April 1, 2017. <https://www.nybooks.com/articles/2017/03/23/frankfurt-school-headquarters-neo-marxism/>.
- Graeff, Erhardt. "Evaluating Civic Technology Design for Citizen Empowerment." Ph.D. diss., MIT, 2018.
- Gil, Natalie. "Loneliness: A Silent Plague That Is Hurting Young People the Most." *The Guardian*, July 20, 2014.
- Hays, Samuel. *Conservation and the Gospel of Efficiency*. Pittsburg: University of Pittsburg Press, 1959.
- Helbing, Dirk., Bruno S. Frey, Gerd Gigerenzer, Ernst Hafen, Michael Hagner, Yvonne Hofstetter, Jeroen van den Hoven, Roberto V. Zicari, and Andrej Zwitter. "Will Democracy Survive Big Data and Artificial Intelligence?" *Scientific American*, February 25, 2017. Accessed August 30, 2019. <https://www.scientificamerican.com/article/will-democracy-survive-big-data-and-artificial-intelligence/>. https://doi.org/10.1007/978-3-319-90869-4_7.
- Hildreth et al. "Building Worlds, Changing Lives, Making History: The Coaches Guide to Public Achievement." Minneapolis: Sabo Center for Democracy and Citizenship, 2016. <http://inside.augsburg.edu/publicachievement/>.
- Ignatieff, Michael. "Which Way Are We Going?" Review of *Age of Anger: A History of the Present* by Pankaj Mishra. *New York Review of Books*, April 1, 2017. <https://www.nybooks.com/articles/2017/04/06/pankaj-mishra-which-way-are-we-going/>.
- Jacobs, Lawrence., et al. "American Democracy in an Age of Rising Inequality." *Perspectives on Politics* 2, no. 4 (2004): 651–66. <https://doi.org/10.1017/S153759270404040X>.
- John, Tara. "How the World's First Loneliness Minister Will Tackle 'the Sad Reality of Modern Life'." *Time*, April 25, 2018.
- Kanigel, Robert. *The One Best Way: Frederick Winslow Taylor and the Gospel of Efficiency*. New York: Viking, 1997.
- Khullar, Dhruv. "How Social Isolation Is Killing Us," *New York Times*, December 22, 2016.
- Leigh, Andrew. "Connected Communities: How Australia's Social Capital Has Declined." *Probono Australia*, August 27, 2015. Accessed December 16, 2019 <https://probonoaustralia.com.au/news/2015/08/connected-communities-how-australias-social-capital-has-declined/>.
- . *Disconnected*. Sydney: University of New South Wales, 2011.
- Malin, Heather, Parissa J. Ballard and William Damon. "Civic Purpose: An Integrated Construct for Understanding Civic Development in Adolescence." *Human Development* 58, (2015): 109. <https://doi.org/10.1159/000381655>.
- Mantena, Karuna. "Another Realism: The Politics of Gandhian Nonviolence." *American Political Science Review* 106, no. 2 (2011): 455–470. <https://doi.org/10.1017/S000305541200010X>.
- Mathews, David. *Reclaiming Public Education by Reclaiming Our Democracy*. Dayton, OH: Kettering Foundation Press, 2006.

- Molnar-Main, Stacey. *Classrooms that Deliberate: Helping Students Communicate and Learn in a Polarizing World*. Dayton, OH: Kettering Press, 2017.
- Ninivaggi, Frank. "Loneliness: A New Epidemic in the USA." *Psychology Today*, Feb 12, 2019.
- O'Connell, Jayne. "Teens aren't socializing in the real world. And that's making them super lonely." *USA TODAY*, March 20, 2019.
- Putnam, Robert. *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton: Princeton University Press, 1993. <https://doi.org/10.2307/j.ctt7s8r7>.
- Rasser, Martijn. "Why Are Deepfakes So Effective?" *Scientific American*, August 14, 2019.
- Roholt, Ross., Robert Hildreth, and Michael Baizerman. *Year Four Evaluation of Public Achievement, 2002–2003: Examining Young People's Experience of Public Achievement*. Kansas City, Missouri: Kauffman Foundation, June 2003.
- Séraphin, Alva., Divina Frau-Meigs, and Ghayda Hassan, with collaboration of Hasna Hussein and Yuanyuan Wei. *Youth and Violent Extremism on Social Media: Mapping the Research*. Paris: UNESCO, 2017: 2.
- Shklar, Judith N. *American Citizenship: The Quest for Inclusion*. Cambridge: Harvard University Press, 1991.
- Singer, Natasha. "The Silicon Valley Billionaires Remaking America's Schools," *New York Times*, June 6, 2017. www.nytimes.com/2017/06/06/technology/tech-billionaires-education-zuckerberg-facebook-hastings.html.
- Skaria, Ajay. "Thinking with Gandhi: The meaning of moral courage and the evil of equality." ABC News Religion, October 22, 2019.
- Ström, Marie-Louise. *Citizens at the Centre – AIDS Councils as Catalysts for Unlocking Citizen Power*. Cape Town: Idasa, 2005.
- Swinburne University of Technology. "Loneliness and social isolation a growing health risk for young Australians." October 1, 2019. Accessed December 17, 2019. <https://www.swinburne.edu.au/news/2019/10/loneliness-and-social-isolation-a-growing-health-risk-for-young-australians/>.
- Tyre, Peg. "Can a Tech Start-Up Successfully Educate Children in the Developing World?" *New York Times Magazine*, June 27, 2017. www.nytimes.com/2017/06/27/magazine/can-a-tech-start-up-successfully-educate-children-in-the-developing-world.html.
- USAID. *AID Strategy on Democracy, Human Rights and Governance*. Washington: US Government Printing, 2013.
- Walsh, Toby. "The AI Revolution" New South Wales: Department of Education, Australia (2020): 3.
- Wikipedia*. "Andrew Leigh." Accessed December 16, 2019. https://en.wikipedia.org/wiki/Andrew_Leigh.
- . "Australian Youth Affairs Coalition." Accessed December 16, 2019. https://en.wikipedia.org/wiki/Australian_Youth_Affairs_Coalition.
- . "Christchurch Mosque Shootings." https://wikipedia.org/wiki/Christchurch_mosque_shootings
- Wilson, David., Elinor Ostrom, Michael E. Cox. "Generalizing the Core Design Principles for the Efficacy of Groups." *Journal of Economic Behavior & Organization* 90, Supplement (2013): S21–S32. <https://doi.org/10.1016/j.jebo.2012.12.010>.