

Refocusing Civic Education: Developing the Skills Young People Need to Engage in Democracy

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Schools have traditionally taken a “just-the-facts-ma’am” approach to civic education, focusing on governmental structures and political systems. We argue that preparing young people to engage with democracy requires far more than rote memorization of facts and figures. Schools should be laboratories of democracy, where young people’s civic intentions are converted into civic behaviors. We argue that to realize that transformation, educators must impart real-world knowledge, practical skills, and nurturing abilities that are not captured by standardized tests of academic achievement: namely, the *interpersonal* and *intrapersonal* abilities conducive to civic mindedness. We discuss what these oft-labeled “noncognitive” skills are and how they are measured, review the evidence that shows how they foster democratic participation, articulate a vision for how civics can help develop students’ noncognitive skills, and lay out a research agenda for scholars seeking to teach young people the skills requisite to actively participate in democracy.

Keywords: civic education; noncognitive skills; political socialization; civic engagement; democratic participation; youth voter turnout

A core mission of the American public education system is to create an engaged citizenry that participates in democracy. Thinkers

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from Plato to the present have argued for this central role of the education system. The founding fathers agreed that the future of the republic would depend on the knowledge and participation of the electorate. Thomas Jefferson, for example, reasoned that the new country must “educate and inform the whole mass of the people” because “wherever the people are well informed they can be trusted with their own government.”^{1,2} In the mid-nineteenth century, the key education reformer Mann (1846) likewise argued that “since the achievement of American independence, the universal and ever-repeated argument in favor of free schools has been that the general intelligence which they are capable of diffusing . . . is indispensable to the continuance of a republican government.” More recently, former Supreme Court Justice Sandra Day O’Connor told *The Washington Post* that “the only reason we have public school education in America is because in the early days of the country, our leaders thought we had to teach our young generation about citizenship. . . . [T]hat obligation never ends. If we don’t take every generation of young people and make sure they understand that they are an essential part of [our] government, we won’t survive” (Heffner 2012). Today, scholars, activists, and policymakers continue to look to civic education as the path for increasing political participation in American democracy (Holbein and Hillygus 2020, ch. 5).³

Despite these lofty goals, empirical evidence finds that although standard civics curricula can sometimes increase political knowledge—especially among the disadvantaged (e.g., Campbell and Niemi 2016; Green et al. 2011; Neundorf, Niemi, and Smets 2016; Niemi and Junn 1998)—it does not produce citizens who are actually engaged in forms of collective governance (e.g., Holbein and Hillygus 2020; Persson and Oscarsson 2010; Weinschenk and Dawes 2022). In this article, we argue that a key reason for this shortfall is the failure of civics curricula to teach young people the appropriate skills required to engage in forms of self-governance.

The structure and content of civic education in the U.S. has traditionally focused on developing political knowledge and other so-called “cognitive” skills, most often using a traditional transmission model of instruction, where teachers transmit information to students through lectures and assigned readings. This approach focuses on teaching facts about government, political institutions, and democratic principles. Civic education has typically followed a model that prioritized fact-based learning and memorizing historical political structures. This focus on historical structures is surfaced in systematic evaluations of the civic education system (e.g., Patterson 2007), in surveys of education stakeholders (e.g., Torney-Purta, Schwille, and Amadeo 1999), and in in-depth interviews with civics teachers (e.g., Holbein and Hillygus 2020). Civics usually spends little time focusing on how people can participate as citizens. In the limited civics courses that most students take, they learn to memorize facts and figures about historical political leaders, the structure of the three branches of government, and notable dates in the formation of America’s republic. The information is presented, in large part, via teacher-dominated lectures that involve very little hands-on student engagement.⁴

We call this *bubble sheet civics*—an approach to civic learning that places explicit emphasis on the types of abilities measured by standardized tests of learning. This approach to civics aligns with the theoretical centrality of cognitive ability in the broader literature in the social sciences (e.g., Heckman and Rubinstein 2001; Herrnstein and Murray 2010) and with the assumed role of fact-based political knowledge in political science (Delli Carpini and Keeter 1993; Lupia 2016).

In our view, civic education must move beyond a bubble sheet approach and invest in developing a broader set of so-called noncognitive skills. We acknowledge that the use of the term “noncognitive” may be controversial as it implies that these skills do not require cognitive processing—which they do. Although this particular term may be debatable, what is *not* controversial is that this set of intrapersonal and interpersonal skills exist and matter for various measures of life success. The family of abilities associated with this skill set has been previously demonstrated to predict success in school and beyond and, in the civic domain, can empower young people to become active participants in democracy once they leave the classroom behind. For example, far more important than memorizing the name of Chief Justice of the U.S. Supreme Court is having the resilience to wait through a long line at a polling location or the problem-solving capability to request and return an absentee ballot. The myopic focus of civic education on one very specific, very narrow type of knowledge and skills reflects an incomplete understanding of the abilities that are key to individual flourishing. Rather than the simple and unidimensional skills so easily captured by standardized verbal and quantitative exams, the abilities necessary for success—in life and, more specifically, in the civic realm—are multiple, complex, and multifaceted.

In short, for civics to fulfill its lofty mission, it must go beyond a narrow focus on performance on bubble sheet exams as a metric of success. Test scores alone do not produce engaged citizens. A focus on test-based accountability has come at the expense of the broad set of skills that are related to—but ultimately independent of—the cognitive proficiencies measured by standardized tests. We need a rethinking of civics, one grounded in a holistic approach to student learning and committed to the promotion of the noncognitive skills so important to democratic engagement.

What Are These So-Called Noncognitive Skills?

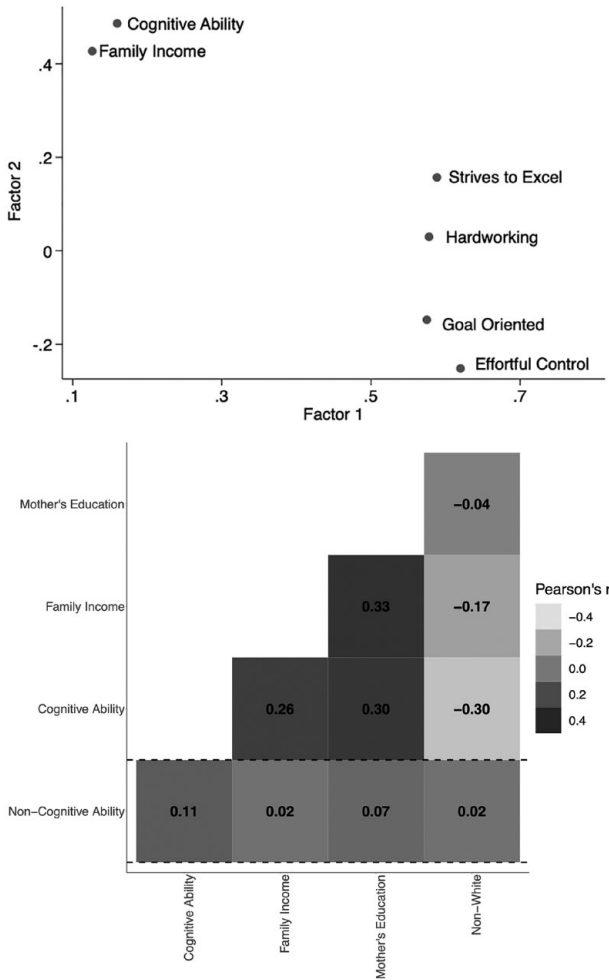
Noncognitive skills can be broadly understood as encompassing both interpersonal abilities (that govern one’s relations with others) and intrapersonal ones (that govern one’s own actions) These competencies relate to self-regulation, effortfulness, and interpersonal interactions. Although defined and operationalized in different ways in different literatures, they can be thought of as the bundle of beliefs, attitudes, and strategies that help us work through the difficult mental process of planning around obstacles and ultimately overcoming them on the way to achieving our goals.

Like others, we use the term *noncognitive* to contrast with standard conceptualizations of intelligence (e.g., Cunha and Heckman 2007; Cunha, Heckman, and Schennach 2010; Duckworth et al., 2019; Edin et al. 2022; Gil-Hernández 2021; Heckman 2000; Heckman, Humphries, and Veramendi 2018; Heckman and Rubinstein 2001; Heckman, Stixrud, and Urzua 2006; Kautz et al. 2014; Shechtman et al. 2013). In the field of political science, measures of verbal aptitude are often used in empirical work related to political participation (e.g., Condon 2015; Nie, Junn, and Stehlik-Barry 1996). The term *noncognitive* implicitly signals that some abilities are not captured by traditional measures of intelligence and abstract problem solving—that is, they are not *cognitive* in the traditional sense. However, our use of this term does *not* mean that these attributes do not require thinking, executive functioning, and top-down processing. They most certainly do. These competencies are sometimes called psychosocial skills, socioemotional skills, soft skills, character skills, capacities of mind, or emotional intelligence. Although these descriptors vary, they all convey a common insight—that human ability is broader than what can be determined by cognitive aptitude tests. Standard measures of cognitive aptitude do not capture all the individual abilities required for success. Indeed, beyond raw cognitive capacity, success also calls for the ability to work through the mental process of anticipating, planning for, and working through obstacles or distractions. Again, we label these skills as *noncognitive* to distinguish them from measures of cognitive ability that capture logic, reasoning, and memory but *not* to imply that they do not require cognition.

The notion that noncognitive skills are an important component of civic education dates at least back to Dewey (1916), who believed that democratic society would benefit if schools taught social competence and socially responsible behavior. In the social sciences, David Wechsler was one of the first to acknowledge that people possess skills separate from those measured by standardized tests of cognitive ability. A prominent psychologist, Wechsler was the driving force behind the development of the seminal Wechsler Adult Intelligence Scale (WAIS) and the Wechsler Intelligence Scale for Children (WISC), both of which are used widely to this day as proxies for cognitive ability, intelligence, or IQ. Despite the prominent role he played in the development of these measures, he understood that the very tests he had developed might not be capturing all the attributes important for individual success and indeed argued that there were abilities other than raw intelligence of profound importance to individual achievement. Wechsler claimed, “In addition to intellective there are also definite *non-intellective factors*. . . . We cannot expect to measure total intelligence until our tests also include some measures of the non-intellective factors” (Wechsler 1943, 103). In the 1970s, renewed interest in noncognitive skills was sparked by psychologist Walter Mischel and Ebbe Ebbensen based on their now-infamous Stanford marshmallow tests (e.g., Mischel and Ebbensen 1970).

To understand what noncognitive skills are, it is helpful to consider what they are *not*. As suggested from the above, they are not captured by classical measures of cognitive ability—that is, verbal and math competency. Nor are they reflective of socioeconomic status. The first panel of Figure 1 presents the results from a

FIGURE 1
Measures of Noncognitive Ability Are Distinct from Cognitive Ability (Math and Verbal) and Socioeconomic Status



SOURCE: First panel: The National Longitudinal Survey of Youth of 1997 (NLSY97); the National Longitudinal Study of Adolescent to Adult Health (Add Health). The second panel is reproduced (with author permission) from Holbein and Hillygus (2020).

NOTE: The first panel shows principal factor weights for cognitive ability, family income, and measures of noncognitive ability. Cognitive ability is measured by the NLSY97's Math Ability Measure. The second panel is a correlation heatmap that shows Pearson's *R* coefficients for cognitive ability, family income, race, and measures of noncognitive ability. Cognitive ability is measured using Add Health's Picture Vocabulary Test, which captures competencies in logic, reasoning, memory, and word skills.

principal component factor analysis (PCA). The data set for this analysis is the National Longitudinal Survey of Youth of 1997 (NLSY97), and the inputs are measures of cognitive ability, socioeconomic status, and commonly used measures of intrapersonal skill.⁵ This panel shows the PCA weights for a two-factor model. As can be seen, measures of noncognitive skill load on a factor distinct from the (very similar) constructs of cognitive ability (math) and socioeconomic status.⁶ The second panel of Figure 1 shows the correlation coefficients between another measure of (intrapersonal) noncognitive ability and cognitive (verbal) ability, along with socioeconomic status and race. As can be seen, noncognitive ability is quite separate from measures of cognitive ability (and socioeconomic status [SES] for that matter).⁷

Noncognitive skills are thought to be much more malleable than personality and cognitive ability—with noncognitive skills being especially teachable earlier in one’s life and perhaps even up into early adulthood (e.g., Blattman, Jamison, and Sheridan 2017). Scholars have theorized that noncognitive abilities can be “shaped by families, schools, and social environments” (Heckman, Pinto, and Savelyev 2013, 1). Empirical evidence from meta-analyses corroborates the malleability of noncognitive skills, especially through well-designed school-based interventions. For example, a recent meta-analysis of thirty interventions in twenty-three countries shows that early childhood programs are quite effective at moving students’ noncognitive abilities (Nores and Barnett 2010). Another meta-analysis of both experimental and nonexperimental comparisons likewise finds that early child education programs can improve noncognitive abilities (Camilli et al. 2010). Finally, a meta-analysis of fifty-two field experiments concludes that various noncognitive skills can be taught, even when the interventions do not start until adolescence (Taylor et al. 2017). In short, noncognitive skills are not predetermined for children and adolescents; that is, something they are either born with or not.

Indeed, as researchers in economics, education, and child development have turned their attention to this subject, scholars are finding that these competencies are not rigid across the life course but are, instead, teachable and predictive of school and labor force outcomes. Accumulating evidence shows that noncognitive skills are associated with increased success in academic and well-being outcomes and, moreover, that schools can effectively promote the development of students’ noncognitive skills (e.g., Heckman 2000; Heckman and Kautz 2012; Kautz et al. 2014; Shechtman et al. 2013). Individuals with better noncognitive skills tend to stay in school longer and perform better academically and also tend to be healthier and score higher on measures of subjective well-being (e.g., Kleiman et al. 2013; Meyers, Pignault, and Houssemand 2013; Reed, Pritschet, and Cutton 2013; Strayhorn 2014).

With their research on *grit*, Angela Duckworth and her colleagues have shone a light on the notion of noncognitive abilities. Duckworth (2016) defines grit as “perseverance and passion for long-term goals.” This concept has captured the national spotlight with Duckworth’s “genius grant,” viral TED Talk, and bestselling book. We emphasize here that grit is part of the family of noncognitive skills but *not* its sum total (Holbein and Hillygus 2020). Thus, when we talk of

noncognitive skills, we are referring to a broad group of constructs capturing interpersonal and intrapersonal abilities—emotion regulation, behavioral control, delayed gratification, empathy, social recognition, and social problem solving (to name a few). In our work, we have found that these factors are clearly related to one another and clearly distinct from cognitive ability and SES. So, although grit appears to matter, so too do the many other interpersonal and intrapersonal abilities.

In sum, human ability is multifaceted and complex. As such, there may be no clear conceptual or empirical cleavages between certain of the so-called cognitive and noncognitive skills. Nonetheless, noncognitive skills represent a much broader terrain of aptitude than do cognitive abilities; verbal and quantitative test scores clearly miss a suite of interpersonal and intrapersonal competencies. Moreover, research across fields in cognition, learning sciences, human development, and the neurosciences (cognitive, cultural, affective) document that thinking, feeling, and perceptions are intertwined and vitally important for individual success (Jagers, Rivas-Drake, and Williams 2019).

How Are Noncognitive Skills Measured?

Noncognitive skills vary not only in how they are labeled and conceptualized but also in how they are measured. Perhaps most common are survey-based scales of an individual attribute (e.g., the ability to delay gratification) that are created through the combination of multiple self-assessment items. But a variety of other measurement methods and approaches have been used, including survey self-reports, third-party evaluations, and observed behavioral techniques. Among these approaches, the first asks people to evaluate their own interpersonal or intrapersonal capacities through a survey-based self-assessment. The second asks third parties (i.e., child psychologists, teachers, parents, siblings, etc.) to evaluate students' capacities. The final approach infers individuals' abilities from their observed behaviors—for example, their propensity to be late, to miss out on their commitments, and to engage in conflict with others—with these observations often drawn from administrative datasets. Each approach comes with pros and cons (see Holbein and Hillygus 2020, ch. 3). However, the consistency of findings across these different multiple approaches speaks to the reliability of the findings.

One challenge in exploring the role that noncognitive skills play is the sheer volume of available measures in prior work—literally dozens and dozens of scales measuring related attitudes, behaviors, and strategies. The predominant approach is to explore a single construct (say, grit) without looking at overlaps between similar constructs. Like many psychological constructs, noncognitive measures too often suffer from the so-called jingle-jangle fallacy—the erroneous assumption that two different things are the same because they bear the same name (jingle fallacy) or that two identical or almost identical things are different because they are given different labels (jangle fallacy) (Kelley 1927).

Given this challenge, individual constructs considered to be noncognitive skills are often interlinked in their measurement, development, and effects. For example,

the concept of grit overlaps with constructs like academic tenacity, perseverance, persistence, engagement, autonomy, self-discipline, self-control, delayed gratification, self-regulation, goal-directedness, positive mindset, and so on.

To navigate this challenge, our work follows the lead of Nobel Prize-winning economist James Heckman and others by examining noncognitive abilities broadly rather than focusing on any one individual subconstruct (Cunha and Heckman 2007; Cunha, Heckman, and Schennach 2010; Heckman 2000; Heckman, Humphries, and Veramendi 2018; Heckman and Rubinstein 2001; Heckman, Stixrud, and Urzua 2006). That is, we conceptualize and operationalize noncognitive skills as a constellation of interrelated abilities, attitudes, and strategies. This choice influences our empirical approach to studying the role of noncognitive skills. When employing observation-based approaches, we first seek to use dimension reduction techniques to identify who has more noncognitive ability overall than others; we then explore the predictive role of those measures for outcomes of interest. In experimental-based approaches, we do not shy away from bundled treatments and embrace the fact that programs that target multiple noncognitive skills inform the broader effects of this construct.

Why Are Noncognitive Skills Relevant for Civic Engagement?

In general, young people face greater barriers to engaging in democracy (e.g., Grumbach and Hill 2022; Hill, Charlotte 2020; Holbein and Hillygus 2020, ch. 6), so that even those with the attitudinal precursors to participation—such as an interest in politics, sufficient levels of political knowledge, a sense of civic duty, and an intention or a desire to participate—might not end up voting. And it is in this scenario where noncognitive skills can come into play by helping young people to *follow through* on their desire to participate.

Despite the best of intentions, people can be derailed from democratic engagement by unexpected work, family, or social responsibilities. Voting takes time, energy, motivation, and effort. Most people vote during their normal day-to-day life, with all its demands and distractions. On Election Day, they may be sidetracked and fail to follow through on their plans. After all, people often fail to follow through on what they set out to do—just think of exercise, healthy eating, academic achievement, and other desirable behaviors. Likewise, people may miss key deadlines to register, get discouraged by long lines or inclement weather, or be deterred by opaque electoral rules. Whether their car breaks down, a work deadline looms, their to-do list beckons, or they are simply worn out, those who have developed self-regulatory skills will be more likely to get to the polls—for those with strong noncognitive skills are better equipped to do the planning, systematic thinking, and hard work to face down obstacles and achieve their goals.

Noncognitive skills set the stage for democratic participation in other ways. First, they may orient individuals toward political engagement itself. It could be the case, for instance, that those who generally strive for success in other aspects

of life are also high achieving and goal oriented in the civic domain. Citizens who have highly attuned levels of intrapersonal skills may be more likely to see the plight of others and engage in politics as a result (Mo and Conn 2018; Mo, Holbein, and Elder 2022). Social skills might help to establish the social networks and connections that promote political involvement. A person's noncognitive skills might help develop financial and educational resources. We know that those with higher levels of noncognitive skills have greater academic achievement, educational attainment, and career success (e.g., Heller et al. 2017; Immordino-Yang, Darling-Hammond, and Krone 2019; Osher et al. 2016). Plus, we know that education is positively correlated with civic participation. And these facts suggest that those noncognitive skills associated with educational attainment might inspire democratic participation even later in life. Conversely, noncognitive skills may enable individuals to avoid negative life events (e.g., crime, school dropout, teenage pregnancy, health problems) that inhibit engagement.

In short, to help young people overcome obstacles to voting—whether those obstacles are inherent to their situation or intentionally placed in their way—we need to cultivate robust interpersonal and intrapersonal skills so they can follow through on their civic intentions. We note briefly here that, in considering the implications of the observed relationship between noncognitive skills and democratic participation, we would emphasize that our take-home message is *not* that young people simply need to pull themselves up by their metaphorical bootstraps to engage in the foundational act of democracy. Just as we would not argue that the lesson from research showing income predicts turnout is that poor people just need to (magically) get better-paying jobs, we are not proposing that young people simply need to increase their noncognitive skills. In any discussion of youth engagement—particularly in discussions about youth voting—we must consider the institutional structures that constrain and incentivize individual-level behaviors. Political engagement does not exist in a vacuum; policymakers can influence citizens' engagement patterns by shaping how, where, and when individuals can participate. Obstacles and barriers to participation in this country are not evenly distributed across the population. The very fact that it can take a great deal of determination, perseverance, and fortitude to engage in politics suggests the need to scrutinize the institutions and policies that hold sway over young voters' ability to cast their ballot. Still, we do argue that in a world where external obstacles present significant obstacles to engagement—not to mention those inherent to any prosocial act—noncognitive skills may help translate desires into action.

How Noncognitive Skills Matter

Although there are relatively few studies in the domain of civic education, the relationship between noncognitive skills and voter turnout has been demonstrated in experimental, observational, and quantitative research that relies on longitudinal surveys, large-scale school administrative records, and public voter files.⁸

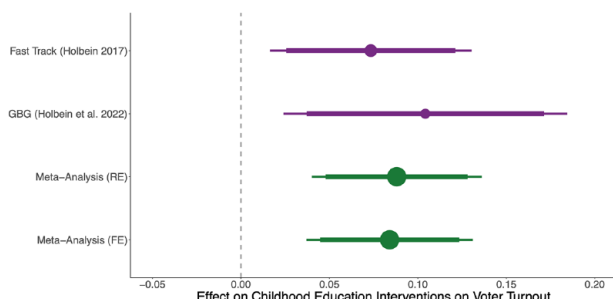
In studying the connection between noncognitive skills and democratic participation, scholars will first field a single-scale measure of one noncognitive skill and pair that with measures of democratic engagement (typically voting). Then, they correlate these two measures, controlling for observable characteristics that might introduce bias (i.e., a conditional-on-observables approach). This work tends to find that noncognitive skills and democratic participation are linked. For example, using an online panel from California and a behavioral measure of delayed gratification, one recent study found that individuals who are more patient are more likely to vote than less patient individuals are (Fowler and Kam 2006).⁹ Measures of sociability also show a relationship with political participation (e.g., Fowler and Kam 2007). Teacher assessments of an adolescent as being hardworking and even tempered have also been found to be predictive of future political participation (Denny and Doyle 2008). Using a unique survey of over 30,000 fifth-, eighth-, and ninth-graders, Holbein et al. (2020) show that gritty students miss less class time and are more engaged in their schools, are more politically efficacious, are more likely to intend to vote when they become eligible, and volunteer more than less gritty students.

Work that conceptualizes noncognitive skills as we do—that is, as a family of attributes related to one’s interpersonal and intrapersonal ability—finds a meaningful relationship between noncognitive abilities and democratic engagement. Using data from eleven different datasets, Holbein and Hillygus (2020, ch. 3–4) show that those with higher noncognitive skills are more likely to participate. They also show that this relationship accounts, in part, for unobservable characteristics that are constant within siblings, twins, and individuals themselves.

Several experimental studies have also suggested a connection between noncognitive skills and democratic participation. Holbein (2017) reports that the Fast Track program—a multisite and multipronged school-based experiment that started teaching kids how to develop their noncognitive abilities in kindergarten and continued throughout elementary school—has a sizable effect on later-life voter participation—even 20 years or more later. Likewise, Holbein et al. (2022) show that the Good Behavior Game—an intervention targeted at developing self-regulation abilities among first graders—also had large and long-term impacts on voter participation in adulthood. (Figure 2 summarizes and meta-analyzes the studies of these two programs.)

Experiments conducted outside of the U.S. also suggest that training students in interpersonal and intrapersonal skills can have payoffs in terms of democratic engagement after the program is over. In a recent innovative report by the Behavioral Insights Team, Kirkman et al. (2016) evaluate the effect of the Citizenship Foundation, Envision, and VAWK/IMAGO programs. Each of these programs emphasized practical skill development among adolescents in applied learning environments. To evaluate these programs, Kirkman et al. (2016) used randomized-control trials in which some students were randomly assigned to participate and others served as the control. Looking at multiple measures of noncognitive ability and volunteering, the researchers found that all the programs enhanced students’ noncognitive skills and their levels of civic volunteering.

FIGURE 2
 School-Based Programs that Develop Students' Noncognitive Skills Increase Later Life Democratic Engagement Meaningfully



SOURCE: Reproduced with permission based on results reported in Holbein et al. (2022).
 NOTE: Effects are intention-to-treat (ITT) estimates. The figure displays coefficients (points) sized by the sample size as well as corresponding 90 percent (thicker bars) and 95 percent (thinner bars) confidence intervals. The bottom two estimates display the meta-analytic estimates of early preventive programs on adult turnout (8.4 percentage points and 8.8 percentage points; $p < .001$). The first meta-analytic estimate uses random effects; the second uses fixed effects.

Rethinking Civic Education

Although recent years have brought a renewed focus on civic education curriculum, conceptions of what that looks like remain largely rooted in cognitive models of participation and assume that facts and knowledge alone will make good citizens. We make the case for a rethinking of civic education. That is, we need to design a pedagogy that promotes the development of the noncognitive skills so necessary for engagement in civic life.¹⁰ To do so, civics must first use applied or project-based learning approaches that will develop the problem-solving and motivational skills students will need if they are to overcome obstacles to participation. Second, schools must strive to engage students in contemporary political debates, issues, and causes. And, finally, teachers must be sure to convey practical information about the mechanics of engaging in politics (e.g., how to register, how and where to vote).

First, *active learning programs*, in which students collaborate with others on complex tasks, have been shown to develop the noncognitive capacities identified as critical to civic participation. These experiences—even when not directly tied to forms of democratic engagement such as voter turnout—foster the problem-solving skills, critical thinking, and social capacities needed to follow through on participatory intentions. With these skills, people are able to persevere in the face of obstacles or distractions, take part in collective decision-making, manage conflict, and communicate persuasively. A large body of research has shown the effectiveness of active learning or project-based approaches for problem-solving, critical thinking, and collaboration skills (e.g., Gill et al. 2018; Saavedra et al. 2021).

Likewise, civics courses that incorporate *deliberation and discussion of current political issues* may foster personal agency, responsibility, efficacy, and motivation. Here again, research points to the effectiveness of this type of learning for promoting youth engagement (Gershtenson, Rainey, and Rainey 2010; Huerta and Jozwiak 2008; Longo, Drury, and Battistoni 2006; Mendelberg 2002; Morrell 2005). Classroom discussion of political issues, research into current affairs, and participation in community projects can all nurture attitudes and behaviors predictive of future participation, perhaps by cultivating a broader set of individual capacities (Campbell 2008; Kahne, Crow, and Lee 2013; Kawashima-Ginsberg and Levine 2014; Martens and Gainous 2013; Persson 2015).¹¹

And finally, civic education needs to recognize that the *specific information needed to vote* is different than that assumed by classic models of voter turnout and indeed the current structure of civic education (Holbein and Hillygus 2020). Without diminishing the importance of learning about history, we would emphasize the need to learn as well about the mechanics of voter registration, about when and how to cast a ballot, and about the candidates and issues on the ballot. For example, what should a voter do when they arrive at their polling station but find their name is not on the voter roll? Providing young people with information about the ins and outs of the voting process can prepare them to field such problems and demystify the election system. Multiple studies have found that the registration forms and absentee ballots of young voters are more likely to be rejected than those of older, experienced voters. Indeed, a July 2020 poll found that half of voters under 35 years old felt they did not have enough information to vote by mail in that November's election. In the U.S., election rules widely across states, contributing to confusion and uncertainty about the process.¹² Simply put, citizens need practical information to engage in the voting process.

What's Working

We now turn our attention to five programs, each conducive to evaluation, that exemplify the reforms we need. They are the Citizenship Foundation program (conducted in the UK), the Envision program (UK), the Voluntary Action within Kent program (UK), the First-Time Voter Program (U.S.), and Democracy Prep Charter Schools (U.S.). Each of these programs is unique, but all share a common thread: an active, applied civics curriculum—one that focuses on getting youth involved, sparking deliberation over contemporary political issues, and/or providing young people with the information they need to be active in politics.

Students (usually 11- and 12-year-olds) in the Citizenship Foundation program participate in applied learning—mock trials; the Go-Givers curriculum, which encourages group discussion and learning on salient political issues; and the schoolwide Make a Difference Challenge, in which pupils identify, research, and write a proposal addressing a local or international social cause. For this project, students are taught follow-through strategies (i.e., fundraising or a form of direct action). Designed to be a supplement to current curricula, the Envision

program provides students (usually ages 16–19) with an opportunity to engage in political action. Over the course of a school year, students focus on a real-world, local community issue (e.g., decreasing crime or improving race relations). Students are grouped in teams and develop proposals/videos/presentations that address the issue. Structured as a multischool competition, *Envision* culminates with an evaluation of the proposals and an award ceremony. The *Voluntary Action* within Kent program is likewise an initiative that focuses on challenging students (ages 15–18) to develop proposals that address social issues.

Although varying in form and substance, these programs from the UK are all designed to help students develop the skills, attitudes, and experiences that they need to work for political change. Are these applied learning social action programs effective? That is, do they help students develop the skills that they need to meaningfully engage? In a recent innovative report by the Behavioral Insights Team, Kirkman et al. (2016) evaluate the effect of these three programs. To do so, they used randomized-control trials wherein some (randomly assigned) students took part in these programs and some (randomly assigned) students did not. To assess the effects of these programs, they looked at five skill measures: cooperation, empathy, grit, problem solving, and sense of community. To measure engagement, they looked at an individuals' willingness for civic engagement in the future.

What they found confirmed that each of these programs enhanced students' noncognitive capacities and, simultaneously, their willingness to engage in democracy. Students who participated scored higher in all five skill measures. The effects were substantively meaningful and suggest that when schools promote active learning, encourage discussion of contemporary political issues, and provide practical information about engaging in politics, students develop noncognitive capacities and their ability to participate in democracy.

In the U.S., similar results have been found for initiatives like the First-Time Voter Program and Democracy Prep Charter Schools. With its emphasis on providing students with applied information about voting, the former has been evaluated in a randomized-control trial that tested the effect of providing students with a one-time, in-class applied voting demonstration in six states—Connecticut, Indiana, Kentucky, Nebraska, New Hampshire, and New Jersey (Addonizio 2011). Students randomly assigned to the program learned how to “register to vote, how to use a voting booth, and . . . were given the opportunity to cast a practice ballot” (Addonizio 2011, 197). Even though these low-impact demonstrations took only about 40 minutes of class time, the program was shown to have a substantial impact on participant voting rates. A small amount of applied learning, then, goes a long way; indeed, this simple, low-cost approach is much more effective than traditional civics curricula that focus on the workings of government and politics alone. Plus, there is complementary evidence that parallel approaches that encourage students to register to vote and then show them how to do so may also be beneficial (Bennion 2009; Gershtenson et al. 2013; Syvertsen, Flanagan, and Stout 2009).

Founded in 2005, Democracy Prep is a growing network of open-enrollment charter schools currently with 22 schools educating approximately 6,500 students

in five locations: New York City; Camden, New Jersey; Washington, DC; Baton Rouge, Louisiana; and Las Vegas, Nevada. In 2012, Democracy Prep received a grant from the U.S. Department of Education to open fifteen additional schools. As the name implies, Democracy Prep focuses on active citizenship; its stated mission is to “educate responsible citizen-scholars for success in the college of their choice and a life of active citizenship.” To accomplish this goal, Democracy Prep schools expose students to an applied civics curriculum that is incorporated across all classes—not just civics courses but also English, math, science, and extracurricular activities. And instruction goes beyond the theoretical: students visit with elected officials, attend public meetings, testify before legislative bodies, and hold active in-class discussions on timely political issues. Even though many are not yet eligible to vote, Democracy Prep students participate in a get out the vote (GOTV) campaign each election day. In these campaigns, students have discussions with potential voters, provide them with nonpartisan information about the election, and encourage them to participate in the democratic process. In their senior year, the students “develop a ‘Change the World’ project to investigate a real-world social problem, design a method for addressing the issue, and implement their plan” (Gill et al. 2018, 1).

Because Democracy Prep students are admitted via lottery—many of the schools are oversubscribed—a well-controlled evaluation of the effect of its approach is practicable. Researchers compared the later-life voter participation of students who had been randomly admitted to Democracy Prep schools—the lottery winners—to that of the students not accepted. As Gill et al. (2018) show, the Democracy Prep students have (unadjusted) much higher rates of voter turnout than did the control. This result suggests that if more schools taught applied civics—by incorporating students into active political discussions and activities across courses and extracurricular activities—we might see a significant uptick in young citizens engaged in the democratic process.

All five programs considered here were evaluated in randomized-control trials—the gold standard of research—and were found to be highly effective. With that kind of validation in mind, we can safely argue that their active learning approach offers great promise as we set out to nurture the next generation of citizens.

Reducing the Costs of Political Participation

So far, we have focused on the link between noncognitive skills and civic engagement. It is equally important to recognize that a key reason noncognitive skills are a necessary resource is because of the high costs of civic engagement. That is, individuals often need grit and resilience to navigate the obstacles to civic participation, especially electoral participation.

In most states, the voter registration process presents the greatest barrier to the ballot box—especially for young people. The National Voter Registration Act of 1993 was intended to ease that path by enabling young people to register when

they get their driver's license, but the timing does not necessarily align. In many states, people are eligible to drive at a younger age than that at which they are entitled to vote. Added to that, as recent years have seen a decline in the number of young people even getting a driver's license, the opportunity on offer may be rendered moot.

Schools have a role to play here as well. With 90 percent of American children attending public schools, there is perhaps no place better suited to reach them and encourage them to vote. One of the most consistent themes of research in this field is that civic education has a compensation effect (Campbell 2019)—that is, it helps compensate for the social disparities associated with the resources needed to navigate the political world. That gap is especially evident in the case of voter registration. Young people who grow up in participatory households, where the family discusses politics around the dinner table and children accompany their parents to the ballot box, are far more likely to register and vote than those with nonparticipatory parents.

Schools, of course, can reach those who do not get such a push from home. But rather than just putting up a table up in the cafeteria, they must give instruction and assistance in completing registration forms. And research has shown that schools helping students to register to vote can indeed help increase turnout (Addonizio 2011; Gershtenson et al. 2013; Syvertsen, Flanagan, and Stout 2009). And as important a role as schools have to play in this matter, not all reforms need be school based. Other initiatives—same-day registration and so forth—have also been shown to help mobilize young people to vote (e.g., Grumbach and Hill 2022; Holbein and Hillygus 2020).

As we have argued here, the project of creating the next generation of voters is a two-part puzzle that requires fostering skill development and working within the current laws. And it is our informed belief that schools must play an outsized role in solving that puzzle.

What Don't We Know?

Although the so-called “noncognitive” skills clearly matter in preparing young people to engage in politics, we still have much to learn about exactly what role they play. In this section, we outline some of the unanswered questions that deserve further research.

Which measures of noncognitive ability—among the hundreds available—are the best?

That is, which measures are most predictive of individual success? While many studies show that noncognitive skills yield positive outcomes, we need clarity about which specific measures/scales are *most* predictive of success and for which outcomes. For education officials to promote the skills that matter most, they must have a sense of which skills to prioritize.

In addition, in a world with limited research resources, we need to better understand which specific operationalizations best capture the conceptual space. Consolidating and codifying the measurement of noncognitive skills will speak to the theoretical and empirical boundaries of the concept itself and potentially resolve debates about labels. This will inevitably speak to the interrelated question of what counts as noncognitive skills versus cognitive skills. Although noncognitive skills are distinct from standardized test score-based measures (see Figure 1), there may still be overlaps between specific skills (e.g., task completion).

How should researchers collaborate in creating curricula for noncognitive skill development in the realm of civics?

With some exceptions, civics teachers have far less latitude in developing noncognitive skills in civics than in developing cognitive abilities. But since many noncognitive skill interventions are not specific to civics courses, the field can benefit greatly from collaborative efforts among education scholars, psychologists, child development researchers, neuroscientists, economists, and political scientists. Because these streams of research have operated in isolation, developing scalable curricula focused on noncognitive skills will require a coming together of previously siloed disciplines. And at the same time, we are creating these curricula, we must be sure to develop high-quality, causal-identification-based program evaluations of their effect. And it should be done with an eye towards moving civic education earlier in the life course (the next underexplored topic).

When in the life course should we start teaching civics?

In the U.S., high school is the primary time when students receive civics instruction, but given what we know about the development of political and civic inputs among young people, the timing may be ill advised. Many attitudes, attributes, and abilities are thought to harden long before students reach high school. The truth is, we know precious little about when to best target our interventions for only very rarely is the same intervention tested—*ceteris paribus*—at different points of time. The future research described above, then, would do well to explore not only which curricula work but when they are best deployed.

How can education officials be persuaded to implement better and more consistent measurements of democratic participation?

It is rare to observe education data sets with single, much less multiple, measures of civic engagement. Indeed, too many evaluative programs focus exclusively on standardized tests, with little to no measurement of the key outcome of the public education system—democratic engagement. This needs to change. One strategy that scholars might adopt would entail merging education/psychological data sets (where noncognitive skills are most often measured) and political science data sets (where political outcomes are most often measured). Such an approach would leverage both survey and administrative data on both ends.

*Shouldn't we be conducting more studies that focus on causal inference?
Where are the randomized-control trials?*

As we noted above, most of the research (with some notable exceptions) on noncognitive skills and democratic engagement is observational. The field needs more consistent, high-quality measurement of noncognitive skills paired with democratic engagement, but simply gathering more correlational data will not suffice to advance the cause. What we truly need are more randomized-control trials and other methods for causal inference—that is, studies that can unpack the causal effects and the causal mechanisms of, say, the various pedagogical approaches to civics and their effects on participation and noncognitive ability.

Shouldn't we be exploring treatment effect heterogeneity?

Prior work has tended to focus on the average treatment effect—often among young people transitioning into adulthood. But we would urge researchers to consider the differential effects of noncognitive skills by individual groups (e.g., race, gender, and political affiliation). Given the wide variation in the costs of engagement across different groups, there may be promising avenues for addressing long-standing political inequalities.

Should we be looking at outcomes other than democratic engagement?

While the literature on noncognitive skills and democratic engagement is at its nascent stages, the literature on these same skills as they pertain to other measures important to democracy is virtually nonexistent. Given the theoretical linkages between noncognitive ability and various democratic outcomes—for example, political tolerance, polarization, discrimination, and knowledge—we would call for a comprehensive research agenda that leverages creative approaches to measurement and causal identification to explore the effect, if any, of noncognitive skills beyond engagement alone.

The research agenda we have laid out here may seem formidable but nonetheless essential for expanding our understanding of the role that noncognitive skills play for today's students as they develop the habit of civic engagement without which the future of our democracy will surely be in peril.

Notes

1. Quotes taken from a letter Thomas Jefferson wrote to James Madison on December 20, 1787, and an oft-quoted letter from Thomas Jefferson to Richard Price, January 8, 1789, respectively.

2. In his *Epilogue to Securing the Republic*, Jefferson also asserted that among all of the possible arguments for public support of education, “none is more important, none more legitimate, than that of rendering the people safe, as they are the ultimate guardians of their own liberty.”

3. For example, Shapiro and Brown (2018, 1) argue that “when civic education is taught effectively, it can equip students with the knowledge, skills, and disposition necessary to become informed and engaged citizens.”

4. When discussing what they find lacking in modern civics, civic reformers choose to focus their efforts on bemoaning the lack of and low performance on standardized tests measuring cognitive proficiencies and political knowledge (e.g., Zubrzycki 2016). We believe that simply adding more cognitive-based focus to civics is likely to be insufficient.

5. For more on this specific sample and measures, see Holbein and Hillygus (2020, ch. 3 appendix).

6. This close correlation between test scores of cognitive ability and socioeconomic status has long been documented. As has long been known in education research, when one measures cognitive ability, one is simultaneously measuring socioeconomic status—they are (to a certain extent) two ends of the same stick. The two are so closely intertwined as to almost support a very provocative, unrecognized conclusion for political behavior research. That is, previous political behavior studies that observe that cognitive ability is relevant for political behavior (e.g., Denny and Doyle 2008; Luskin 1990; Verba, Scholzman, and Brady 1995) may simply be picking up on another way of seeing how social class drives political behavior. This explanation lends itself more to a (normatively troubling) social-origins explanation of voting rather than the ability-based explanation that has been ascribed in previous work.

7. Follow-up work has also shown that many separate noncognitive skills are separate from the Big Five personality measures (e.g., Holbein and Hillygus 2020, ch. 3–4).

8. One advantage of using voting and public-use voter files as the key measure of democratic participation is that voting is the only measure of democratic participation verifiable at scale. All other measures suffer from potential over-reporting issues/social desirability.

9. Using alternate measures of delayed gratification, Hill, Seth (2020) finds a similar connection.

10. To be sure, noncognitive skills can and should be nurtured not only in civics classes but in all courses and cocurricular activities. Moreover, few studies have directly evaluated the development of noncognitive skills within civics classrooms, but those that have been done show promising results. Moreover, the observed relationship between noncognitive skills and voter turnout point to the following specific evidence-based reforms.

11. Along these lines, Metz and Youniss (2005) use a quasi-experimental design to evaluate the effects of service learning and find that a service requirement increased students' intentions to engage politically and the likelihood of their discussing politics. There is evidence that some specific curricula, including programs like We the People (Owen 2018), Student Voices (Feldman et al. 2007; Pasek et al. 2008), and Kids Voting, can have positive effects on a variety of civic outcomes. Engaging students in service learning/social action campaigns—be those canvassing voters, designing proposals to address real-world social problems, holding mock elections or trials, or interacting with elected officials—shows potential for increasing youth civic engagement (Gill et al. 2018; Kirkman et al. 2016). While these have shown promise, there has been little research on the mechanisms that drive these effects. (We return to this point in the last section.)

12. Critically, this type of curriculum not only potentially develops noncognitive skills but also helps students to gain the relevant information and experience for engaging in the political world. Teaching the mechanics of the registration and voting process can help instill new voters with the confidence they need to engage in political life. Too often, young people make the choice not to vote because they do not think they are sufficiently well informed to vote, despite having interest (and intentions) in doing so. Qualitative research finds that young people too often have misperceptions about the informational requirements to be a good voter and hold themselves to a higher informational standard than do older voters (Holbein and Hillygus 2020). When asked, “Do you feel that all eligible American citizens should vote, or should people only vote if they are well-informed about the elections?” only 40 percent of 18- to 29-year-olds said all should vote, compared to 64 percent of those 65 and older (PRRI 2018). More experienced voters seem to recognize that it is not necessary to research every campaign issue or down-the-ballot race and that party labels can be used as a voting heuristic (Hillygus 2020). In contrast, young people are more likely than older Americans to say that “not knowing enough about the issues is a reason they do not get involved.”

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