Democratic *Knowledge* Project

Recommendations for Civic Education Assessment

White Paper- June 2019

Mixed Method and Holistic:

Assessing Civic Readiness

EDMOND J. SAFRA
Center for Ethics

Democratic *Knowledge* Project

About Our Organization

WHO WE ARE: A distributed research and action lab at Harvard University focused on civic education, engagement, and efficacy

WHAT WE DO: Curriculum development, professional development, assessment and research on teaching practices for civic educators

OUR MISSION: Identify, strengthen, and disseminate the knowledge, dispositions, capacities and skills that civic actors need to sustain healthy democratic life

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Executive Summary

Given that civics assessment was by and large not included in the accountability frameworks that followed from No Child Left Behind or the Common Core, the field of K-12 education should take the opportunity now presented with the introduction of new civics assessments to improve on the methodologies and practices of previous accountability frameworks. This opportunity generates some further criteria that might be used to distinguish high-value from low-value accountability methodologies.

One problem with the testing regimes that flowed from No Child Left Behind and the Common Core is that they often made the test-designers the de facto drivers of curriculum design. The accountability regimes were designed, in principle, to establish standards but to leave the actual structure and design of the curriculum expected to deliver learning that would support schools in meeting those standards to districts and schools. The standards themselves left open the question of which of a diversity of possible texts a school might emphasize in meeting the standards; or of how to balance among the many different things the standards called upon schools to achieve. Yet test designers answered these questions implicitly as they made choices about what to include in tests and what to leave out (Conley, 2014). This resulted, of course, in the common occurrence of teachers learning to "teach to the test," with the result that the tests themselves became in many cases the curricular framework driving learning. We believe that the time has come for test designers to take their cues from expert-designed curricula, rather than the other way round. Consequently, we argue for a policy model in which states follow the adoption of standards with a period of curriculum development tightly linked to content experts, with test design to follow only after that 2–3 year period of curriculum design has been completed. We improve conditions for student learning when we reject a model that derives assessment tools directly from the standards and instead adopt a model where **assessment tools are built in response to high quality curricula designed to align with the standards**.

High quality civics curricula focus on the following dimensions of civic learning:

- **Civic Knowledge:** an understanding of government structure, government processes, related knowledge and concepts, and American civic life, history and political thought in a global context.
- **Civic Dispositions/ SEL outcomes:** attitudes important in a democracy such as a sense of civic duty, sense of efficacy, concern for the welfare of others, and commitment to trustworthiness and bridge-building.
- **Civic Skills and Capacities:** competencies in the use of one's voice, including basic writing, speaking and listening skills and skills of research, investigation, and critical thinking; competencies in the use of practices of democratic coordination, political institutions, and media literacy; and access to networks, opportunities to participate, and other forms of social capital that promote civic agency.

A comprehensive assessment strategy that consistently incorporates all three domains will be **mixed method**, **holistic, psychometrically sound,** and **protective of student privacy**. The strategy will use item banks to assess civic knowledge; pre- and post- psychometric surveys to assess civic dispositions and SEL outcomes; rubric-based portfolio assessment to assess skills and capacities; and survey instruments to assess civic learning opportunities. The strategy will not increase the time spent on testing in schools.

Sec. 1: Overview and Key Principles

As states begin to adopt or revise standards for civics education, it is critical that policy makers, administrators, educators, students, and parents be able to evaluate how new curricula contribute to civic development. Effective assessment of civics education requires clear definitions of success, valid procedures for measuring indicators of success, and strategies for providing the most relevant information to different stakeholders. The Democratic Knowledge Project (DKP) at Harvard University builds on a tradition of theoretical and empirical work in civic education to propose a three-part conceptualization of civic education and a framework for assessing each component.

We focus on the following three dimensions of civic learning and expression:

- **Civic Knowledge:** an understanding of government structure, government processes, related knowledge and concepts, and American civic life, history and political thought in a global context.
- **Civic Dispositions/ SEL outcomes:** attitudes important in a democracy such as a sense of civic duty, sense of efficacy, concern for the welfare of others, and commitment to trustworthiness and bridge-building.
- **Civic Skills and Capacities:** competencies in the use of one's voice, including basic writing, speaking and listening skills and skills of research, investigation, and critical thinking; competencies in the use of practices of democratic coordination, political institutions, and media literacy; and access to networks, opportunities to participate, and other forms of social capital that promote civic agency.

In our model, both knowledge and dispositions must be linked with skills and capacities in order for youth to develop into successful civic actors (See Figure 1). The processes depicted

in this model are supported by opportunities for high quality civic education, which, as discussed in Section 5, will also be measured in the DKP's assessment framework.

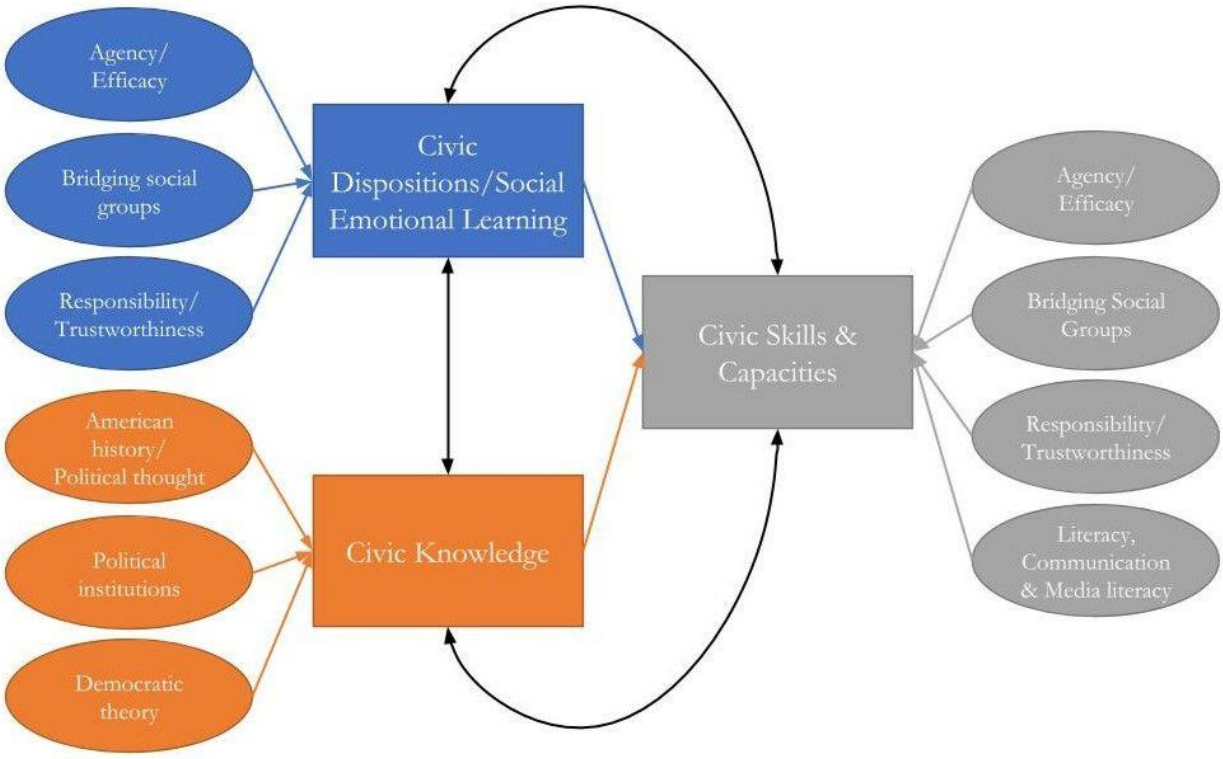


Figure 1. Dimensions of Civic Learning and Expression

Preparation for civic participation can be understood in terms of three interrelated constructs: civic knowledge (e.g., history and theory of democracy), dispositions or social emotional learning and character development (e.g., responsibility and trustworthiness, bridging skills), and civic action/lived civics, which depend on a set of practices, skills, and behaviors (e.g., coordination and consensus-building). These practices, skills, and behaviors must be linked to the relevant knowledge and dispositions to provide a basis for civic success. Previous efforts to assess civic education have tended to focus on just one or two of these three constructs. For example, students in Florida take a test that includes questions about civic knowledge along with

sections addressing character development but there is no review of whether they can actively put skills, practices, and behaviors to work.

A more comprehensive assessment strategy that **consistently incorporates all three domains** will help better demonstrate student learning and identify curricular gaps. Moreover, recognizing the need for assessment across all three domains draws attention to the need for innovative assessment methods. For instance, the three domains of civic learning call for different assessment methods. Civic knowledge may be assessed using multiple-choice style content questions, similar to those that might be found on an AP exam. Aspects of social emotional learning/character development may be best assessed using self-report measures from relevant psychological literature. Civic action/lived civics could be most meaningfully measured by examining portfolios of student work, such as an action civics project, supported by rubrics and district and state-level grading conferences. Consequently, good civics assessment will use **hybrid methodologies**. Our work, in short, aims at holistic assessment of preparation for civic participation.

All measures used for assessment must be **psychometrically sound**. That is, they should reliably predict positive civic participation, be free of ideological bias, and provide accurate information about the target knowledge, skills or attitudes at high and low levels. In addition, student performance should always be analyzed in relation to the opportunities for learning presented to the student. Research indicates that access to extracurriculars like student government, debate, and Model UN supports student learning. Any comprehensive civics assessment will include **assessment of the civic learning opportunities** available to students and their achievement should be considered in relation to the backdrop opportunity conditions.

In sum, four key criteria will be necessary in good civics assessment strategies:

--they will address all three aspects of civic learning and expression;

--they will deploy hybrid methodologies;

--they will use psychometrically sound measures;

--and they will include assessment of civic learning opportunities.

Given that civics assessment was by and large not included in the accountability frameworks that followed from No Child Left Behind or the Common Core, the field of K-12 education should take the opportunity now presented with the introduction of new civics assessments to improve on the methodologies and practices of previous accountability frameworks. This opportunity generates some further criteria that might be used to distinguish high-value from low-value accountability methodologies.

One problem with the testing regimes that flowed from No Child Left Behind and the Common Core is that they often made the test-designers the de facto drivers of curriculum design. The accountability regimes were designed, in principle, to establish standards but to leave the actual structure and design of the curriculum expected to deliver learning that would support schools in meeting those standards to districts and schools. The standards themselves left open the question of which of a diversity of possible texts a school might emphasize in meeting the standards; or of how to balance among the many different things the standards called upon schools to achieve. Yet test designers answered these questions implicitly as they made choices about what to include in tests and what to leave out (Conley, 2014). This resulted, of course, in the common occurrence of teachers learning to "teach to the test," with the result that the tests themselves became in many cases the curricular framework driving learning. This situation results in less rich and impactful curriculum than could be designed if those with expertise in the domain area took responsibility for designing curriculum (Darling-Hammond, 2007; Koretz, 2015; Smyth, 2008). We believe that the time has come for test designers to take their cues from expert-designed curricula, rather than the other way round. Consequently, we argue for a policy model in which states follow the adoption of standards with a period of curriculum development tightly linked to content experts, with test design to follow only after that 2–3 year period of curriculum design has been completed. We improve conditions for student learning when we reject a model that derives assessment tools directly from the standards and instead adopt a

model where **assessment tools are built in response to high quality curricula designed to align with the standards**.

A second problem with the accountability frameworks that have flowed from NCLB and the Common Core is simply how much time is taken away from teaching for use in assessment. Teachers, families, and students have all reached their limit with regard to their tolerance for giving up learning time to testing time. Any successful new test should ensure that no additional testing time is added to the current allocation of time on testing. New civics assessment could be achieved nonetheless through two key strategies: (1) **repurposing components of ELA or STEM testing to test for civics as well;** and (2) designing formative and summative assessments that are already part of curricula so that they can aggregate with validity to provide information of value to state level accountability processes. It is possible to build assessments into curricula that measure student progress in all three of the domains of civic learning and expression, and to design these assessments for validity upon aggregation. While we discuss how to do that below, here we simply name the importance of a criterion of **aligning curricular assessments with accountability needs.**

On the model we are articulating here, a successful assessment toolkit must be useful for multiple stakeholders, providing accountability at school, district, and state levels, and informing practice for teachers. To achieve this, the assessment will include measures of relevant learning experiences (e.g., active learning, discussion) that will help clarify the processes driving performance on outcome measures. For teachers, this assessment approach will yield detailed information about student learning across the three dimensions of civic education. At higher organizational levels, aggregate data can support accountability and decision-making even as students' test scores are kept private. In this way, this approach emphasizes accountability at the institutional rather than individual level.

Finally, we want to insist that in the domain of civics assessment, it is critically important that a **strict privacy firewall** be maintained between the data an individual teacher can access about the performance of individual students and the aggregate data that would be available to

districts and states. However good the intentions of educators and assessment professionals may be, assessment tools in the civics space run the risk of generating efforts to restore the literacy tests of the mid 20th century that sought to exclude some citizens, mainly African Americans, from voting. The use of the USCIS naturalization test as an assessment instrument is particularly dangerous in this regard, as it leaves students who do not pass vulnerable not only to not receiving their high school degree but also to potential political efforts to strip them of their right to vote.

Thus, we can add four more criteria to our list of what would make a successful assessment strategy or toolkit in the civics space. A successful strategy would:

--ensure that all assessment tools are built in response to high quality curricula designed to align with the standards;

--where possible, use components of ELA or STEM testing to test for civics as well;

--build accountability strategies out of the assessments built into curricula themselves;

--maintain a strict data privacy firewall to protect the data of individuals from state actors.

The DKP is currently working in Massachusetts in collaboration with the Cambridge Public School System and with the Cross-District History Standards Mapping Team (led by the North Middlesex district) to design one or more year-long 8th grade civics curricula. As we build the curricula, we are closely focused on the design of the assessments within the curricula, and seek to design those in such a way as to support a state accountability framework. The DKP-Cambridge Grade 8 Civics Course, "Civic Engagement in Our Democracy," consists of six units that culminate in a civic action unit. Collectively, the units seek to develop civic knowledge, civic dispositions, and civic skills and capacities across the whole year-long course. We integrate assessments for each domain into the curriculum and seek to develop those assessments--whether formative or summative--with methods that can support their use for

broader purposes of tracking school and district performance. The proposed assessments are as follows:

Cambridge 8th Grade Civics Formative & Summative Assessment Items		
Sequence	**Assessment Item**	**Assessment Method**
Pre-test	Civic Knowledge	Multiple-choice questions
Pre-test	Civic Dispositions/SEL Outcomes	Psychological measures
Unit 1	Identity & Values Project (with written reflection)	Rubric-based assessment
Unit 1	Introduce Civic Action Project	Rubric-based assessment
Unit 2	DBQ #1 - created around the Declaration of Independence materials	Rubric-based assessment
Unit 3	Historical Analysis and Thinking (HAT) Writing Prompt	Rubric-based assessment
Unit 4	DBQ #2 - Should voting be mandatory? Should the voting age be lowered?	Rubric-based assessment
Unit 5	800 word research-based editorial with bibliography and in-text citations	Rubric-based assessment
Unit 6	Civic Action Project Portfolio (with research, bibliography, and written reflection)	Rubric-based assessment
Unit 6	Final Exam (including civic knowledge)	Multiple-choice questions
Post-test	Civic Dispositions/SEL Outcomes	Psychological measures

In the sections that follow, we outline our strategy for assessing student growth and learning in relation to the three dimensions of civic learning and expression; and in relation to civic learning opportunities.

Sec. 2: Assessing Civic Knowledge

The pre- and post- multiple choice civic knowledge assessment will assess content acquisition that aligns with the expectations for content acquisition designed into the curriculum. Since the curriculum has been designed to align with the state standards, this end-of-year final exam might also be used to assess performance in relation to the state standards. To achieve this, a few things would be necessary: the state would need to maintain and continually refresh a bank of validated Item Response Theory (IRT)-based questions from which the district could draw in setting its final exam; district leaders, rather than specific classroom teachers, would have to select items for the exam; and the state would need to provide some parameters for the number and difficulty of questions included in the exam.

The value of such an approach would be to re-establish an appropriate relationship among standards, curriculum, and assessment. Any given standards framework leaves open many important questions that ought to be decided at the level of the curriculum. Given an array of texts required in the standards, for instance, how much relative weight should be put on each--do some receive greater attention and priority? Which concepts are linked to which other ones and in which orders? What definitions are used for key concepts? When test designers design assessment instruments directly in relation to the standards, they are offering *de facto* answers to these questions of curricular design. The result of this, as teachers begin to "teach to the test," is

that test designers become the de facto curriculum designers for a system. This is non-ideal as test-designers typically have neither top-of-the-line domain expertise nor pedagogic expertise.

A superior process would be one in which a state developed standards, supported the development by scholarly and curricular professionals of curriculum or curricula that align with those standards, and then builds assessment instruments in relation to those curricula. This puts curriculum design in the right hands and maximizes the value of the learning opportunities presented to our students.

The structure for a final exam that we are currently developing for the DKP-Cambridge Curriculum follows this model. It will be a 25 item test, requiring 45 minutes to administer. This time allocation is already dedicated to a pre- and post-test for 8th grade Social Studies. The DKP's goal is to help Cambridge Public Schools develop a validated test that provides meaningful information about levels of achievement.

Sec. 3: Assessing Civic Dispositions/ SEL Learning

The DKP is currently testing an assessment toolkit derived from existing measures for social emotional learning/character development that focuses on students' civic efficacy, equitability, and capacity for safe and responsible engagement. Both the year-long DKP-Cambridge Grade 8 curriculum and the Unit 6 civic action project rely heavily on the Ten Questions for Young Change-makers Reflection and Action Framework (https://yppactionframe.fas.harvard.edu/) developed by the DKP. The Ten Questions Framework is designed to cultivate efficacy, equitability, and self-protection in civic action. Of these three central domains, efficacy and equitability are the most well-studied in the civic education literature, but there is substantial variation in how these constructs are defined theoretically and operationally.

The work of developing a toolkit to assess dispositions and SEL learning in the civics space depends on theory development; measure development; and measure validation. The

theory behind the Framework and its three key constructs was developed by Danielle Allen and colleagues in the MacArthur Foundation research network on Youth and Participatory Politics over the course of an eight year research study on the impact of new media and technologies on youth civic development. To develop and validate measures, the DKP has spent the 2018-19 academic year testing potential measures with a view to designing short pre- and post-SEL survey to be administered to students enrolled in the DKP-Cambridge curriculum in the 2019-20 academic year.

Existing measures that are well-aligned with the conceptualizations of efficacy, equitability, and self-protection embedded in the Ten Questions Framework have been selected where possible for testing in our study. In the case of equitability, an adaptation of an existing measure used in a different domain of research is proposed, but all other measures (See Table 2) have been previously used in research on civic education and youth civic engagement (see Online Appendix for a copy of the survey instrument). The six core measures tested were: Internal Political Efficacy; Citizen Self Efficacy; Egalitarianism; Equality Matching; Online Respect; and Value of Media Literacy. In addition to six core measures selected to assess efficacy, equitability, and self-protection, secondary measures in each domain were included to evaluate convergent validity. The secondary measures for each of the three core domains were included in separate versions of the survey to reduce the time needed for participants to complete the survey and help limit fatigue and careless responding.

These six measures were evaluated on the basis of both classical test theory and item response theory (IRT). Specifically, each measure was evaluated based on its internal reliability and its ability to discriminate among different levels of the construct. In addition, relations of the core measures with secondary measures related to each construct were examined to help evaluate convergent and discriminant validity. Overall, the results of the factor analysis suggest that each measure assesses an underlying construct discernable from the others.

That said, not all six of the constructs are equally satisfactory, and our testing work continues. Both efficacy measures were positively related to reports of actual engagement among

young adults above the age of enfranchisement in the United States, lending additional confidence to the expectation that feelings of efficacy are positively associated with civic participation. The egalitarianism measure suffers from a correlation with ideology, and we are now seeking alternatives to it as a basis for measuring equitability. Equitability, as understood in the Ten Questions Framework, requires a commitment to the broader community and not only to individual interest. The equality matching measure fares better in capturing this theoretical construct without correlating to ideology. That said, the relatively low internal reliability of this measure, though moderately acceptable, suggests the need to further modify the items in order to improve the measure's coherence. Despite the relatively low internal reliability of the equality matching measure and its moderate relations with other variables, the IRT analysis revealed that it is able to discriminate across relatively low and high levels of the construct, in contrast to the egalitarianism measure. Accordingly, the equality matching measure was also more normally distributed, with most scores grouped around the midpoint. Nonetheless, further modification of the measure is needed to improve its internal reliability and informativeness before it can be used in evaluation studies.

Self-protection in the context of civic engagement was operationalized in this study using a measure of respectful online behavior (online respect) and a measure of concern for media literacy (value of media literacy). Each measure demonstrated high internal reliability, and despite measuring distinct components of self-protection, the two measures were more strongly correlated with each other than with any other core measures, with one exception (value of media literacy was more strongly correlated with internal efficacy than with online respect). More important, the value of media literacy was the strongest predictor of the relevant secondary measure, media locus of control (positively), and online respect was the strongest predictor of online harassment perpetration (negatively). Online respect was also negatively related to online harassment victimization, but it is notable that citizenship self-efficacy was more strongly related to victimization, though in the opposite direction. As discussed above, there is a clear link between self-efficacy and civic engagement, and greater participation online may increase

exposure to cyber harassment. This finding highlights the importance of promoting strategies for responsible online engagement alongside efforts to increase civic efficacy and participation.

The core measures of self-protection are powerful, internally consistent predictors of related variables, but they are negatively skewed, with most participants reporting high levels of agreement with their items. Their utility in evaluations of civic education will thus be limited unless the target populations are expected to be below average in their initial levels of online respect and value of media literacy.

The results of our exploratory study of the psychometric qualities of six measures of civic efficacy, equitability, and self-protection are preliminary, and the DKP will field another study in summer 2019. We expect that further measure development will be necessary beyond this point in order to develop measures that are not strongly negatively skewed. That said, there is also good news in our results. It appears that for the most part, the measures relate to one another in coherent patterns, suggesting acceptable convergence around key constructs important in civic development. The key problem, then, is not so much one of theoretical confusion as a matter of test design, though greater theoretical clarity may be needed to create items capable of discriminating at high levels of these civic attitudes and dispositions.

We continue to work to refine these measures, plan to field a pilot SEL assessment instrument in the 2019-20 academic year in support of the DKP-Cambridge curriculum, and expect that one to two years of piloting will be necessary before we achieve a stable instrument.

Our study and work on these measures are described in full in Appendix A.

Sec. 4: Assessing Skills and Capacities

The DKP-Cambridge Grade 8 Curriculum culminates in a civic action project. Student choice defines this experience. Students achieve their learning objectives by applying knowledge and skills to an extended, often collaborative project process. Success promotes important civic

skills like communication, collaboration, time management, consensus-building and problem-solving. In addition, project-based learning promotes student self-awareness and reflection.

Teachers work in support of the civic action project to scaffold students through a process in which students themselves must undertake inquiry projects to develop the content knowledge necessary to support their civic action project. Teachers and students work together to track student progress with a rubric, and students complete the work with a reflection both on what they have accomplished and on the process that got them there. Along the way to the conclusion of the project, they complete planners and other process management tools and documents. These combined with the final artifacts of their work and their final reflection form the elements of a portfolio assessed by the instructor in alignment with the unit rubric. For the civic action unit, an example rubric, which is still in development, is included in Appendix C.

In addition, the other practice standards covered in the curriculum, including ELA writing skills and research skills will be assessed with a rubric-based approach to measuring student performance and growth. Rubrics are designed to align with state standards, and district grading conferences should be established to train instructors in the use of the rubrics and, as needed, coding methodologies. Training in grading conferences provides an opportunity to establish inter-rater reliability on sample materials. Teachers are thereby equipped to provide students with assessments in their classroom that align with district-wide standards. In addition to providing teachers with training in the use of rubrics and support in achieving inter-rater reliability, end-of-year grading conferences should be used to spot check alignment of grading standards across schools.

This methodology could also be used state-wide with a state-wide grading conference drawing in participation from all districts.

For the writing assessments, this same method of rubric-use would also be amenable to automation, which would provide another possible strategy for achieving assessment at scale for this feature of civic learning.

Sec. 5: Assessing Civic Learning Opportunities

The Civic Engagement Research Group at the University of California Riverside has designed a cost-effective way of measuring civic learning opportunities by embedding questions in existing student surveys. They generally work with the districts to design surveys that speak to the district's needs and then analyze the data to produce school and district level reports that describe both learning opportunities and outcomes as well as the degree of equality across demographic groups. Often they couple this with a limited number of student and teacher focus groups - these really help to describe key issues. The goal is to connect the findings to discussion of school improvement efforts and efforts to strengthen civic education. CERG currently works with the Oakland, Chicago, and Riverside School Districts, with two districts in Washington State, and with some high schools in Los Angeles. The Democratic Knowledge Project endorses their methodology as one critical component of robust assessment in the civic education space. Below we provide a sample report from their work in Chicago.

Civic Engagement School Report for Sample High School

What? This report examines the extent to which CPS students are receiving civic learning opportunities that have been found to promote effective participation in civic, political, and community life. The report is based on roughly two dozen questions that were added to the 2016-2017 5Essentials survey. The tables that follow provide a sense of how frequently youth reported experiencing these civic learning opportunities as well as reports of their civic commitments and levels of engagement.

Why This Matters? In the CPS Vision, Success Starts Here, we articulate a commitment to preparing students for college, career and civic life. Preparing students to engage in democracy, voice their perspectives, and effectively participate in civic life has been a

cornerstone of public schooling from its inception. Rigorous longitudinal studies have found these learning opportunities promote the civic capacities, commitments, and forms of engagement listed in the outcome measures. Several studies have also indicated that these kinds of learning opportunities foster student engagement, attendance, and credits earned. For more information on the importance of civic education as well as the learning experiences and desired outcomes shared in this report, check out the following brief Research on the Impact of Civic Learning.

-SY 2016-2017 School Civics Landscape----------

Had a Student Voice Committee: Yes
Had a Civics Course: Yes (1 semester)
Had an AP Government Course: No
Previous SEF score on Civic Life Component: n/a
Network: 1

CIVIC LEARNING EXPERIENCES IN SCHOOL

The following survey items asked students to report the extent to which their school leaders and teachers are responsive. Studies have shown that students who attend schools with positive school climates can develop a positive sense of belonging, connection to peers, trust in institutions, and, eventually, healthier engagement in the broader society and its democratic system.

"If students express concerns about a school policy, school leaders are responsive."

	Strongly Disagree	Disagree	Agree	Strongly Agree
Your School	11.9%	22.4%	58.2%	7.5%
Network 1	10.7%	23.1%	55.1%	11.1%

The District	11.7%	23.7%	53.8%	10.8%

"If students express concerns to their teachers about their class, teachers are responsive."

	Strongly Disagree	Disagree	Agree	Strongly Agree
Your School	8.4%	17.9%	63.2%	10.5%
Network 1	7.9%	17.2%	60.5%	14.4%
The District	8.5%	17.4%	59.8%	14.3%

The next set of survey items asked students to report on school-based civic learning opportunities which have been shown to have a positive impact on students' civic knowledge, skills, and dispositions. For example, engaging in discussions of current and controversial issues enables students to develop their understanding of issues and learn about multiple perspectives. Such discussions have been found to promote engagement with political issues and elections. In addition, simulations such as political and legal role plays enable students to practice and learn about participation in democratic processes and procedures. Finally, when students have opportunities to be involved in a project to improve their school or community, they can apply what they have learned by taking informed action—which has been linked to a number of positive outcomes such as 1) the development of social trust, 2) respectful engagement, 3) the development of collaborative action/engagement skills, 4) opportunities for youth agency, 5) social relatedness, and 6) political-moral understanding.

"I have discussed current events and/or controversial issues."

	Strongly Disagree	Disagree	Agree	Strongly Agree
Your School	6.6%	16.2%	64.6%	12.6%
Network 1	3.6%	9.1%	56.1%	31.2%
The District	3.8%	11.4%	55.8%	29%

"This past year in my classes, I have participated in political or legal role plays."

	Never	Once	Twice	3 + times
Your School	47.7%	23.6%	20.6%	8%
Network 1	46%	24.6%	18.6%	10.9%
The District	46.3%	22.6%	19.9%	11.2%

"This past year in my classes, I have been involved in a project to improve my school or community."

	Never	Once	Twice	3 + times
Your School	33.5%	27%	29%	10.5%
Network 1	33.8%	29.4%	21.9%	14.9%
The District	33.8%	28%	23.8%	14.4%

CIVIC COMMITMENTS AND OUTCOMES

The following survey items illustrate students' reported civic commitments and engagement outside of school. Rigorous longitudinal studies have found that the types of learning opportunities detailed above promote the civic capacities, commitments, and forms of engagement listed in this section.

"Getting involved in improving my community is important to me."

	Not at all true	A little true	Somewhat true	Mostly true	Completely true
Your School	8.4%	17.2%	33.5%	31.5%	9.4%
Network 1	8.4%	15.3%	29.7%	29.7%	16.8%
The District	8.9%	14.8%	29.1%	29.6%	17.6%

"There are issues in my community or the nation that I care deeply about."

	Not at all true	A little true	Somewhat true	Mostly true	Completely true
Your School	8.9%	17.8%	25.7%	36.1%	11.4%
Network 1	6.4%	11.7%	25.5%	31.4%	25%
The District	7.2%	11.9%	26%	31.3%	23.7%

"I have worked or cooperated with others to try to solve a problem affecting my school, city, or neighborhood."

	Never	Once	Twice	3 + times
Your School	31.8%	35.9%	23.2%	9.1%
Network 1	34.5%	28.7%	21.3%	15.5%
The District	34.8%	26.8%	23.2%	15.3%

DIGITAL CIVIC EXPERIENCES IN SCHOOL

Civic and political participation has been transformed in the digital age, and, therefore, new skills and dispositions are needed. For example, youth today can readily access an array of information and audiences to make their voices heard. At the same time, there are many challenges related to "fake news," harsh partisanship, and a system that often feels unresponsive. Digital civic learning experiences in school, like those included in the survey items below, can help youth navigate the challenges of contemporary participation in the digital age. And, research has shown that teaching media literacy can promote increased online political engagement and exposure to diverse viewpoints as well as the likelihood that students will correctly distinguish between accurate and inaccurate online content.

"I have talked about how to find different points of view on political and social issues on the Internet."

	Never	Once	Twice	3 + times

Your School	11.5%	28.2%	39.7%	20.6%
Network 1	10.9%	21.3%	32.1%	35.7%
The District	10.6%	22.8%	34.1%	32.5%

"I have discussed how to tell if the information I find online is trustworthy."

	Never	Once	Twice	3 + times
Your School	13%	31.7%	34.6%	20.7%
Network 1	10.5%	22.4%	33.3%	33.9%
The District	10.3%	24.5%	34.8%	30.5%

"I have created and shared something on the Internet related to a societal issue."

	Never	Once	Twice	3 + times
Your School	19.1%	29.2%	35.9%	15.8%
Network 1	27.2%	21.2%	28%	23.5%
The District	23.4%	23.3%	30.3%	23%

DIGITAL CIVIC OUTCOMES

The following survey items illustrate students' reported digital civic engagement outside of school. Similar to the relationship among non-digital civic learning opportunities and outcomes, studies have found that the types of digital civic learning opportunities listed above have the ability to promote students' digital civic capacities, commitments, and forms of engagement listed in this section.

"I have shared someone else's article, blog, picture or video related to politics."

	Never	Less than 1x/month	1 or 2x/month	Once a week	Several times a week
Your School	31.7%	15.9%	26%	18.8%	7.7%
Network 1	34%	15.9%	20.2%	17.8%	12%

The District	32%	15.7%	20.2%	19.6%	12.4%

"I have created and shared my own article, blog, picture or video related to politics."

	Never	Less than 1x/month	1 or 2x/month	Once a week	Several times a week
Your School	39%	16.7%	21%	17.6%	5.7%
Network 1	45.8%	14.9%	16.5%	14.6%	8.2%
The District	41.6%	14.4%	17.8%	16.6%	9.6%

What Next? As you reflect on this data, we suggest using the following types of questions to guide your conversation with colleagues:

- What are the areas of strength for your school?
- What are the areas for improvement?
- In what ways did the responses indicate any particular pattern or support any assumptions about students' level of civic engagement or civic learning opportunities in your school?
- What kinds of questions might you ask groups of students or teachers to better understand the kinds of learning opportunities students are receiving and the experiences they have had that they consider to be effective or desirable?
- Given your strengths and areas for improvement, what are one or two actions your school might take to improve access to or deepen civic learning at your school? (You can also refer to the SEF Civic Life Guidebook for more ideas and guidance)

Also, consider how you might use this data in the following ways:

- As complementary data to help you think about your school's culture and climate and components that can support social-emotional learning (visit cps.edu/SEL for more information)
- As examples of civic learning opportunities that you can look for in instructional core walks or other peer-to-peer classroom visit structures.

- As information that your school's leadership can explore with your Student Voice Committee.
- As suggestions of what you might focus on if you have chosen Student Voice, Engagement & Civic Life as a CIWP priority; as evidence for completing your SEF's self-assessment component.

[For more information or support on promoting student voice, engagement, and civic life contact the CPS Department of Social Science and Civic Engagement (Jessica Marshall, jmmarshall2@cps.edu) or visit the Knowledge Center page.]

Section 6: From District to State

Our recommendations are that (1) districts should use a mixed-method, holistic approach to develop formative and summative assessments of student learning that align with high quality civic education curricula; and that (2) with the application of creativity and research rigor, district-developed assessment instruments might successfully function to support state-level assessment needs.

DKP-Cambridge Assessment Elements

1. SEL: Pre- and post-survey. 10 minute survey
2. Civic Knowledge Pre-Test, linked to Civic Knowledge End of Year Test
3. Civic Knowledge Test: Develop End of Year Final Exam from state-level validated assessment bank of items; 25 questions; 45 minute exam.
4. Civics Writing Assessment- Use rubric to organize district level grading conference that achieves inter-rater reliability across schools for assessment of two DBQs.
5. Action Civics Assessment- Use rubric to organize district level grading conference that achieves inter-rater reliability across schools for portfolio assessment.
6. Civic Learning Opportunities Assessment- Incorporate civic learning opportunity items on existing "student voice" survey, currently administered by School City.
7. Roll up results in District Level report on civic learning opportunities and outcomes.

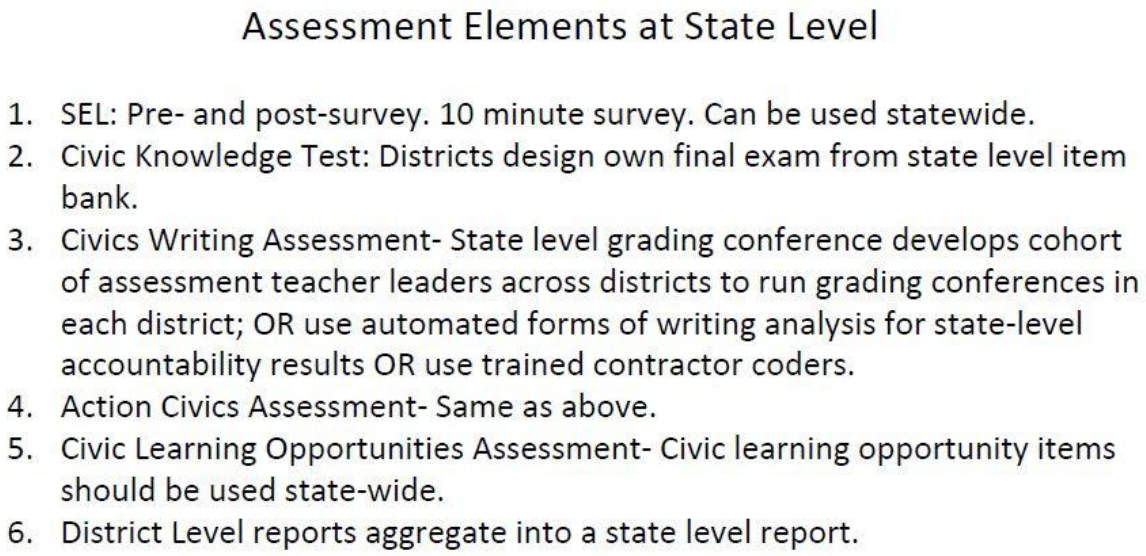


Figure 2. Alignment of District and State Level Assessments for Civic Education

In sum, we propose a strategy for assessment that establishes alignment among standards, high quality curricula, district assessment strategies, and state assessment strategies, as presented above in Figure 2.

References

Allen, D. (2004). *Talking to strangers: Anxieties of citizenship since Brown v. Board of Education,* Chicago, IL: University of Chicago Press

Allen, D., & Light, J. S. (Eds.). (2015). *From voice to influence: Understanding citizenship in a digital age.* Chicago, IL: University of Chicago Press.

Choi, M., Glassman, M., & Cristol, D. (2017). What it means to be a citizen in the internet age: Development of a reliable and valid digital citizenship scale. *Computers & Education, 107*, 100-112.

Clark, L. A., & Watson, D. (2019). Constructing validity: New developments in creating objective measuring instruments. *Psychological Assessment.* Advance online publication. http://dx.doi.org/10.1037/pas0000626

Conley, D. T. (2015). A new era for educational assessment. *Education Policy Analysis Archives, 23*(8).

Darling-Hammond, L. (2007). Race, inequality and educational accountability: The irony of 'No Child Left Behind'. *Race Ethnicity and Education, 10*(3), 245-260.

Diemer, M. A., Rapa, L. J., Park, C. J., & Perry, J. C. (2017). Development and validation of the Critical Consciousness Scale. *Youth & Society*, *49*(4), 461-483.

Fiske, A. P., & Haslam, N. (1996). Social cognition is thinking about relationships. *Current directions in psychological science*, *5*(5), 143-148.

Flanagan, C. A., Syvertsen, A. K., & Stout, M. D. (2007). Civic Measurement Models: Tapping Adolescents' Civic Engagement. CIRCLE Working Paper 55. *Center for Information and Research on Civic Learning and Engagement (CIRCLE)*.

Gibson, C, & Levine, P. (2003). *The civic mission of schools*. New York and Washington, DC: The Carnegie Corporation of New York and the Center for Information and Research on Civic Learning.

Haslam, N., & Fiske, A. P. (1999). Relational models theory: A confirmatory factor analysis. *Personal Relationships, 6*, 241-250.

Haslam, N. (Ed.). (2004). *Relational models theory: A contemporary overview*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc., Publishers.

Ho, A. K., Sidanius, J., Kteily, N., Sheehy-Skeffington, J., Pratto, F. Henkel, K. E., Foels, R., Stewart, A. L. (2015). The nature of social dominance orientation: Theorizing and measuring preferences for intergroup inequality using the new SDO7 scale. *Journal of Personality and Social Psychology, 109*(6), 1003-1028.

Jones, L., & Mitchell, K. (2016). Defining and measuring youth digital citizenship. *New Media & Society, 18*(9), 2063-2079.

Kahne, J. (2005). *California survey of civic education survey items.* Oakland, CA: Civic Engagement Research Group at Mills College (CERG).

Kahne, J., & Bowyer, B. (2017). Educating for democracy in a partisan age: Confronting the challenges of motivated reasoning and misinformation. *American Educational Research Journal, 54*(1), 3-34.

Kahne, J., Hodgin, E., & Eidman-Aadahl, E. (2016). Redesigning civic education for the digital age: Participatory politics and the pursuit of democratic engagement. *Theory & Research in Social Education, 44*(1), 1-35.

Kahne, J., & Westheimer, J. (2006). The limits of political efficacy: Educating citizens for a democratic society. *PS: Political Science & Politics*, *39*(2), 289-296.

Koretz, D. (2015). Adapting educational measurement to the demands of test-based accountability. *Measurement: Interdisciplinary Research & Perspectives, 13*(1), 1-25.

Lopez, M. H., Levine, P., Both, D., Kiesa, A., Kirby, E., & Marcelo, K. (2006). The 2006 civic and political health of the nation: A detailed look at how youth participate in politics and communities. *College Park, MD: Center for Information and Research on Civic Learning and Engagement.*

Maksl, A., Ashley, S., & Craft, S. (2015). Measuring news media literacy. *Journal of Media Literacy Education, 6*(3), 29-45.

O'Rourke, N., & Hatcher, L. (2013). *A step-by-step approach to using the SAS system for factor analysis and structural equation modeling* (2nd ed.). Cary, NC: SAS Institute.

Ryan, C. L., & Bauman, K. (2016). Educational attainment in the United States: 2015 population characteristics. *Current Population Reports—Census*, P20-578.

Schulz, W., Ainley, J., Fraillon, J., Kerr, D., & Losito, B. (2010). *ICCS 2009 international report: Civic knowledge, attitudes, and engagement among lower secondary school students in 38 countries.* Amsterdam, The Netherlands: International Association for the Evaluation of Educational Achievement (IEA).

Smyth, T. S. (2008). Who is no child left behind leaving behind? *The Clearing House: A Journal of Educational Strategies, Issues and Ideas, 81*(3), 133-137.

Stern, C., & West, T. V. (2016). Ideological differences in anchoring and adjustment during social inferences. *Personality and Social Psychology Bulletin, 42*(11), 1466-1479.

Vraga, E., Tully, M., Kotcher, J. E., Smithson, A., & Broeckleman-Post, M. (2015). A multi-dimensional approach to measuring news media literacy. *Journal of Media Literacy Education, 7*(3), 41-53.

Westheimer, J., & Kahne, J. (2004). What kind of citizen? The politics of educating for democracy. *American educational research journal*, *41*(2), 237-269.

Zaff, J., Boyd, M., Li, Y., Lerner, J. V., & Lerner, R. M. (2010). Active and engaged citizenship: Multi-group and longitudinal factorial analysis of an integrated construct of civic engagement. *Journal of Youth and Adolescence*, *39*(7), 736-750.

Appendix A

DKP 2018-19 Study: Overview

Social Emotional Learning/Character Development Measure Development

The DKP has been working to develop an assessment toolkit for social emotional learning/character development in civics education. Effectively promoting the development of civic attitudes and dispositions is critical to effective ethics education (Gibson & Levine, 2003). Drawing on the work of Danielle Allen with The MacArthur Foundation's Research Network on Youth and Participatory Politics (2009-2017) and new insights into civic participation in a new digital age (Allen & Light, 2015; Kahne, Hodgin, & Eidman-Aadahl, 2016), the DKP has focused on the development of attitudes and dispositions supportive of effective, equitable, and self-protective civic action.

This project will include two preregistered online correlational studies designed to assess the structures and validity of commonly used and new measures of efficacy, equitability, and self-protection. The first study, described here, is exploratory, with factor analysis used to analyse the scale structures and relations among variables tested but interpreted tentatively. In addition, item response theory (IRT) analyses have been conducted with each of the core measures to determine how informative the scales are across levels of performance. In the second study, the scale structure suggested by the first study will be tested using confirmatory factor analysis, and hypothesized relations among variables supported by the first study's results will be tested.

Methods

Participants. Participants in the first study were recruited using Turk Prime (www.turkprime.com) and were compensated by third-party research firms for completing a 30 minute online survey hosted on Qualtrics (Qualtrics, Provo, UT). All participants were required to affirm that they live in the United States and that they are between the ages of 18 and 25 years old. To ensure an adequate sample size for factor analysis of the items in the key measures of

efficacy, equitability, and self-protection, 900 participants between the ages of 18 and 25 were recruited (O'Rourke & Hatcher, 2013). Participants were excluded from analyses according to the criteria specified in the preregistration (http://aspredicted.org/blind.php?x=2gw5ky). Of the 900 participants, 14 failed to answer the attention check question, and an additional 120 gave incorrect responses. All 134 participants who failed to correctly answer the attention check question were eliminated from the sample. In addition, 31 participants who failed to provide coherent answers to any of the open-ended questions were excluded. Although not included in the pre-registration for this first study, 18 participants who did not complete all survey measures were also excluded. The final sample included 717 participants (see Table 1 for participant characteristics).

Table 1.
Variable Means and Demographic Information

Characteristic	*M (SD)* *95% CIs*
Age	21.68 (2.42) [21.51, 21.86]
Political Liberalism	4.08 (1.50) [3.97, 4.19]
Education	
High School	269 (22.87 %)
Some College	274 (38.21%)
College Graduate	164 (22.87%)
Other	10 (1.39%)
Gender	
Female	450 (62.76%)
Male	253 (35.29%)
Other	14 (1.95%)
Race/Ethnicity	

Asian	40 (5.58%)
Black	104 (14.50%)
Latinx	69 (9.62%)
Native American	8 (1.12%)
White	478 (66.67%)
Other	18 (2.51%)

Measures. The Ten Questions Framework is designed to cultivate efficacy, equitability, and self-protection in civic action. Of these three central domains, efficacy and equitability are the most well-studied in the civic education literature, but there is substantial variation in how these constructs are defined theoretically and operationally. Existing measures that are well-aligned with the conceptualizations of efficacy, equitability, and self-protection embedded in the Ten Questions Framework have been selected where possible. In the case of equitability, an adaptation of an existing measure used in a different domain of research is proposed, but all other measures (See Table 2) have been previously used in research on civic education and youth civic engagement (see Online Appendix for a copy of the survey instrument).

Table 2.

Core and Converging Measures

Target Domain	Core Measure(s)	Converging Measures
Efficacy	*Citizenship Self-Efficacy Scale* (Schulz et al., 2010) ● 6 items on Likert scale *Internal Political Efficacy Scale* (Schulz et al., 2010) ● 9 items on Likert scale	*Civic Duty* (Zaff, Boyd, Li, Lerner, & Lerner, 2010) ● 12 items on Likert scale *Civic Activities* (Lopez, Levine, Both, Kiesa, Kirby, & Marcelo, 2006) ● 5 items, ordinal choices *Electoral Activities* (Lopez et al., 2006) ● 5 items, ordinal choices *Political Voice* (Lopez et al., 2006)

		• 9 items, ordinal choices
Equitability	*Egalitarianism* (Diemer et al., 2017) • 5 items on Likert scale *Equality Matching* (adapted from Haslam & Fiske, 1999) • 6 items on Likert scale	*Social Dominance Orientation-Short* (Ho et al., 2015) • 8 items on Likert scale *Justice-oriented Citizenship* (Kahne, 2005) • 6 items on Likert scale
Self-protection	*Online Respect* (Jones & Mitchell, 2016) • 7 items on Likert scale *Value of Media Literacy* (Vraga, Tully, Kotcher, Smithson, & Broeckleman-Post, 2015) • 8 items on Likert scale	*Online Harassment Victimization* (Jones & Mitchell, 2016) • 6 items, dichotomous *Online Harassment Perpetration* (Jones & Mitchell, 2016) • 7 items, dichotomous *Media Locus of Control* (Maksl, Ashley, & Craft, 2015) • 6 items on Likert scale

In addition to six core measures selected to assess efficacy, equitability, and self-protection, secondary measures in each domain were included to evaluate convergent validity. The secondary measures for each of the three core domains were included in separate versions of the survey to reduce the time needed for participants to complete the survey and help limit fatigue and careless responding. Participants were randomly assigned to one of the three resulting versions of the survey.

Efficacy. In the Ten Questions Framework, efficacy is defined in terms of a person's ability to take effective civic action using formal and informal strategies. Beyond navigating the institutions and processes of official government, efficacy in a democracy requires that one have the confidence and ability necessary to engage with others and persuade them to join a collective effort (Allen, 2004). This view of civic efficacy is similar to that underlying a number of well-validated and extensively used measures, including a measure of civic skills used in a large-scale study of civics education in California (Kahne, 2005), and a measure of citizenship self-efficacy developed for the 2009 International Civic and Citizenship Education Study

(ICCS), a large international study of civic development (Schulz, Ainley, Fraillon, Kerr, & Losito, 2010). Researchers have distinguished this form of efficacy from belief in the responsiveness and effectiveness of the government, or external efficacy. Compared to external efficacy, internal efficacy is more strongly related to civic participation (Gastil & Xenos, 2010), and, in some cases, high levels of internal efficacy paired with relatively low levels of external efficacy may be most likely to prompt action (Kahne & Westheimer, 2006).

For the ICCS, Schulz et al. (2010) assessed internal efficacy by asking participants to report generally how prepared they feel to participate in politics. In addition, Schulz et al. (2010) included a related measure of citizenship self-efficacy, which asked participants to report how well they think they can do specific civic activities, such as organize fellow students, write letters, and argue their political point of view. Both measures had significant unique positive relations with political knowledge and expectations for future active civic participation. These two measures were used in this study to assess efficacy.

Internal Efficacy. The measure of internal efficacy (Schulz et al., 2010) included six items responded to on a Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Items were statements reflecting confidence in one's capacity for civic engagement, such as, "I know more about politics than most people my age," and "I have political opinions worth listening to."

Citizenship Self-Efficacy. The measure of citizenship self-efficacy (Schulz et al., 2010) included eight types of civic activity (e.g., "Discuss a newspaper article about a conflict between countries," and "stand as a candidate in a local election"). Participants were asked to indicate how well they think they can do each on a 5-point Likert scale ranging from 1 (*not well at all*) to 5 (*extremely well*).

Equitability. Concern for equality is a core value of democratic societies, and its development has received substantial attention from researchers interested in civic education. Theoretical and operational definitions of equality, like those for efficacy, vary in important ways. They range from conventional concerns for basic fairness in the distribution of

opportunities and services (e.g., trust in the American promise, Flanagan, Syversten, & Stout, 2007) to critical identification and confrontation of systemic injustices (e.g., justice-oriented citizenship; Westheimer & Kahne, 2004). Abstract endorsement of egalitarianism is commonly measured, and Diemer et al. (2017) recently developed and validated a brief egalitarianism scale that is used here as a general measure of egalitarianism.

Equitability, as understood in the Ten Questions Framework, requires a commitment to the broader community and not only to individual interest. In democracies, some people will inevitably find themselves on the winning and losing sides of different debates. Rather than see the failure to achieve consistent consensus as a flaw, Allen (2004) argues that it should be accepted and dealt with openly. This requires acknowledging the sacrifices of others, and assuring them that their sacrifices will be reciprocated in the future. Relationships characterized by this sort of reciprocity are categorized as *equality matching* relationships in Relational Models Theory (Haslam, 1994; Haslam & Fiske, 1996), and they are less intimate than those based on selfless commitment (*communal sharing* relationships) but more intimate than those based on precise proportionality in exchange (*market pricing* relationships). Equality matching relationships do not set expectations for consensus (as do communal sharing relationships), but they also do not require immediate or exact returns for members' contributions (as do market pricing relationships). Given the alignment of the definition of equality matching with the concept of equitability in political friendship, a version of the equality matching subscale of the relational models questionnaire (Haslam & Fiske, 1999), modified to address ideal relationships among civic actors, will be included in the assessment of equitability. While the original measure items describe different ways of relating to others in an unspecified context, the modified instructions and items direct respondents to think about ideal relations among individuals in the context of civic or political decision-making.

Egalitarianism. The egalitarianism measure included 5 items addressing an ideological commitment to equality, both in terms of opportunities (e.g., "All groups should be given an equal chance in life") and outcomes (e.g., "It would be good if groups could be equal").

Participants were asked to rate their agreement with each statement on a scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Equality Matching. The measure of equality matching was developed for this study on the basis of an instrument developed by Haslam and Fiske (1999) to assess commitment to long-term reciprocity in civic and political decision-making. Participants were asked to imagine how people should ideally treat one another when dealing with civic and political matters and then rate how often they should adhere to different norms of reciprocity on a scale ranging from 1 (*never*) to 5 (*always*). Example items include, "One-person, one-vote is their principle for making decisions with each other," and "If one group of people does what an other group wants, next time the second group should do what the first group wants."

Self-Protection. Unregulated by legal or well-established social norms, the Internet presents significant risks to civic actors for some of the same reasons it offers promising opportunities for engagement (Allen & Light, 2015; Choi, Glassman, & Cristol, 2017; Kahne & Bowyer, 2017). Most civic engagement has the potential to expose people to harassment, put them at risk of embarrassing themselves or harming someone else, or make them vulnerable to misinformation or propaganda. The lack of constraints online tends to exacerbate these risks, making self-protection an increasingly important civic skill.

In the Ten Questions Framework, self-protection involves extending political friendship to others while not making oneself vulnerable to exploitation, manipulation, or abuse. Research addressing online civic behavior, though still nascent, has demonstrated that respectful online behavior is related to both lower levels of online harassment perpetration and victimization (Jones & Mitchell, 2016), suggesting that people can learn to attenuate the interpersonal and social risks of online engagement.

Exposure to misinformation and propaganda online poses an additional risk, and research suggests that valuing media literacy is associated with greater knowledge of the news media as an industry, knowledge of current events, and news skepticism (Vraga, Tully, Kotcher, Smithson, & Broeckleman-Post, 2015). To reflect the importance of both aspects of self

protection, measures of respectful online engagement (Jones & Mitchell, 2016) and perceived value of media literacy (Vraga et al., 2015) were be used to assess development in this domain.

Online Respect. The measure of online respect included seven statements regarding online behavior (e.g., "If I disagree with people online, I watch my language, so it doesn't come across as mean", "My favorite places to be online are where people are respectful towards each other") to which participants responded by rating their agreement on a scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Value of Media Literacy. The value of media literacy measure included eight items addressing the importance of the media to supporting democracy and the importance of consuming media critically to stay informed (e.g., "People need to critically engage with news content," and "The news media have a role in informing citizens about civic issues").

Results

Prior to assessing the psychometrics of each of the six core measures individually, an exploratory factor analysis was conducted to evaluate the factor structure of all items. (See Appendix B for details regarding the factor analysis and all other analyses discussed here.) This analysis suggested that six factors corresponding to the six measures be retained. It revealed four items from three scales (i.e., egalitarianism, value of media literacy, and equality matching) that did not correspond to the six factors, and these items were dropped from subsequent analyses. Next, each scale was assessed for internal reliability and submitted to an item response theory (IRT) analysis.

Then, correlations among all core variables and correlations of the core variables with all secondary measures were examined. These simple analyses revealed the core measures to be highly interrelated, with the exception of egalitarianism and the two efficacy measures. In addition, they generally indicated convergence of core and secondary measures for each of the three dimensions, though less convincingly in the case of equitability than self-protection and efficacy.

Finally, the secondary measures in each domain were regressed on the two related core measures in multiple regression analyses. These results generally indicated that each of the two core measures in each domain accounted for unique and significant variation in the relevant secondary measures, suggesting that no single measure adequately addresses any of the three broader domains of efficacy, equitability, and self-protection.

Discussion

The broad purpose of this exploratory study was to assess the validity of measures related to three forms of civically important social emotional and character development: efficacy, equitability, and self-protection. These three dimensions were primarily operationalized using six core measures. These six measures were evaluated on the basis of both classical test theory and item response theory (IRT). Specifically, each measure was evaluated based on its internal reliability and its ability to discriminate among different levels of the construct. In addition, relations of the core measures with secondary measures related to each construct were examined to help evaluate convergent and discriminant validity.

Before turning to the individual measures, it is important to note that an exploratory factor analysis suggested that each measure constituted a distinct factor. There was little support for a solution with three factors corresponding to efficacy, equitability, and self-protection. In the cases of efficacy and equitability, this is surprising given the close conceptual overlap of the two relevant core measures, particularly the two efficacy measures. It is less surprising that the measures of self-protection, value of media literacy and online respect, formed different factors. Overall, the results of the factor analysis suggest that each measure assesses an underlying construct discernable from the others.

Efficacy

The two measures of efficacy, internal efficacy and citizenship self efficacy, demonstrated good psychometric properties. Each was internally consistent, and neither was

strongly skewed. Accordingly, the IRT analyses revealed that the two measures are informative at all but the highest and lowest levels, with wide information curves centered over the scale average. The two efficacy measures were also strongly related with each other and with self-reported participation in civic activities, political voice, and electoral activities. Since both measures explain unique variance in the secondary measures, it is difficult to justify eliminating either. Instead, IRT analyses can be used to create abbreviated measures by selecting items that provide information at different levels of efficacy. This strategy can help to reduce the length of the instruments while retaining their distinct coverage of the efficacy construct.

Overall, these results demonstrate a direct link between feelings of efficacy and a broad range of civic engagement activities among young adults. This finding is particularly important since these measures of efficacy are primarily used with younger participants who often have limited opportunities for civic engagement. Consequently, forms of civic efficacy have largely been associated with intentions for future civic participation. In this study, both efficacy measures were positively related to reports of actual engagement among young adults above the age of enfranchisement in the United States, lending additional confidence to the expectation that feelings of efficacy are positively associated with civic participation.

Equitability.

Egalitarianism. Equitability was assessed using a measure of egalitarianism and a modified version of a measure of the equality matching relational model (Fiske & Haslam, 1996). The egalitarianism measure demonstrated excellent internal reliability, and it was strongly correlated with social dominance orientation (negatively) and justice oriented citizenship (positively), the two secondary measures of equitability. Unexpectedly, it was more strongly related to value of media literacy and online respect than to the other core equitability measure, equality matching. In addition, it was more strongly related to civic duty, a secondary efficacy measure, than any other core measure. These results suggest that scores on these measures may reflect a broad conscientious prosociality.

However, the measures of egalitarianism, value of media literacy, online respect, and civic duty were the four most negatively skewed, with average scores ranging from 3.97 (for value of media literacy) to 4.33 (for egalitarianism) on scales with maximums of 5. The IRT analyses indicate that these scales are primarily capable of distinguishing performance at low levels of their underlying constructs. The strong correlations among these variables may therefore be best understood in terms of their abilities to accurately capture particularly high levels of disaffection and callousness regarding society. For example, the strong correlation between value of media literacy and egalitarianism may not be accounted for by the fact that highly egalitarian people are also very concerned with media literacy, positive online engagement, and bettering their community. Instead, the correlation may be due to people who have very little concern for social equality also not caring very much about media literacy, being responsible online, and contributing to their community.

The egalitarianism measure appears to be best suited to understanding low levels of commitment to equality. One way to think of this is in terms of a typical classroom quiz. A quiz that is very easy will result in most students getting high scores, and only the least competent students will receive lower scores. Since all of the questions are easy, students with the greatest knowledge will have no opportunity to distinguish themselves from those with only moderate knowledge. The egalitarianism measure, along with other similarly skewed measures, appears to be similar to this sort of easy quiz, with over 77% (n = 545) of participants receiving scores equal to or greater than 4 (agree), on a scale with a maximum of 5 (strongly agree). Only 33 (4%) participants had average scores below the scale midpoint. If used to evaluate civics education, the egalitarianism measure may fail to detect real increases in commitment to equality if students begin their education with average scores on the measure, just as a very easy math quiz might fail to show improvement among students who obtained near perfect scores to begin with. Efforts should be made to develop measures of egalitarianism that better reflect gradations among high levels of the construct.

Equality matching. Drawing on Allen's (2016) description of political friendship and relational models theory (Fiske & Haslam, 1996), a measure of equality matching was used to assess commitment to reciprocity and fairness in civic relationships. The items for this measure were only slightly adapted from the original measure (Fiske & Haslam, 1996), though they were framed in a specifically civic context. The relatively low internal reliability of this measure, though moderately acceptable, suggests the need to further modify the items in order to improve the measure's coherence.

Despite the relatively low internal reliability of the equality matching measure and its moderate relations with other variables, the IRT analysis revealed that it is able to discriminate across relatively low and high levels of the construct, in contrast to the egalitarianism measure. Accordingly, the equality matching measure was also more normally distributed, with most scores grouped around the midpoint. Nonetheless, further modification of the measure is needed to improve its internal reliability and informativeness before it can be used in evaluation studies.

Self-protection. Self-protection in the context of civic engagement was operationalized in this study using a measure of respectful online behavior (online respect) and a measure of concern for media literacy (value of media literacy). Each measure demonstrated high internal reliability, and despite measuring distinct components of self-protection, the two measures were more strongly correlated with each other than with any other core measures, with one exception (value of media literacy was more strongly correlated with internal efficacy than with online respect). More important, the value of media literacy was the strongest predictor of the relevant secondary measure, media locus of control (positively), and online respect was the strongest predictor of online harassment perpetration (negatively). Online respect was also negatively related to online harassment victimization, but it is notable that citizenship self-efficacy was more strongly related to victimization, though in the opposite direction. As discussed above, there is a clear link between self-efficacy and civic engagement, and greater participation online may increase exposure to cyber harassment. This finding highlights the importance of promoting

strategies for responsible online engagement alongside efforts to increase civic efficacy and participation.

The core measures of self-protection are powerful, internally consistent predictors of related variables, but they, like the egalitarianism measure, are negatively skewed, with most participants reporting high levels of agreement with their items. Their utility in evaluations of civic education will thus be limited unless the target populations are expected to be below average in their initial levels of online respect and value of media literacy.

General Discussion. The purpose of this study was to evaluate the suitability of existing measures for assessing efficacy, equitability, and self-protection in civics education. The results of the factor analyses and multiple regression analyses suggest that each of the six measures used to operationalize these three constructs was distinct enough to support retaining all of them. However, the IRT analyses and examinations of the distributions of scores on each measure suggest that the measures vary considerably in their ability to distinguish among different levels of the underlying constructs.

The measures of efficacy, citizenship self-efficacy and internal efficacy, demonstrated the most sound psychometric properties, but abbreviating them may increase their utility in student assessments. The measures of equitability each had a distinct set of limitations. The egalitarianism measure was highly skewed and does not adequately discriminate among higher levels of egalitarianism; it also correlates with ideology. In contrast, the equality matching measure was more normally distributed, but it lacked sufficient internal reliability, perhaps attenuating its relations with other variables. The measures of self-protection, value of media literacy and online respect, were both highly skewed and, like the egalitarianism measure, failed to discriminate at high levels of their constructs. Overall, these findings point to the need for further development of measures of equitability and self-protection if these two key components of civic education are to be reliably assessed for accountability purposes.

Limitations. This study was designed to evaluate the properties of the focal measures in a large sample of young adults (aged 18–25). The sample was not designed to be nationally

representative, but White, Black, Asian, and Native American participants were represented at rates nearly identical to those for the relevant age groups according to U.S. Census data. In terms of education, just over 60% of the sample reported having completed some or all of a college degree, which is roughly similar to the 65% of all Americans between the ages of 25 and 34 who have completed at least some college (Ryan & Bauman, 2016). Therefore, there is little apparent reason to expect that this sample differs markedly from the general population. However, no direct information was collected regarding the socioeconomic status, immigration status, sexual orientation, religious affiliation, or geographical location of participants, so it is impossible to determine if the sample is representative in these terms.

The online administration of the survey may also limit the generalizability of the results to offline contexts where there may be greater incentive to answer thoughtfully. A large number of participants (20%) had to be excluded from analyses because of evidence of inattentive or incomplete responding, and it is plausible that many of the retained participants did not carefully consider their responses. In classroom settings, students may put more thought into their answers, perhaps attenuating some of the skew observed in some measures. However, students may also be more susceptible to social desirability biases, which could exacerbate the problem.

Finally, all of the measures used are based on participants' self reports. Although self reports are often the most direct ways of learning about people's attitudes and thoughts, they are limited by participants' insight. For example, an individual might strongly agree with the statement, "If I disagree with people online, I watch my language, so it doesn't come across as mean" (from the online respect measure), but nonetheless find themselves responding angrily to an acquaintance's political posting online. Likewise, two individuals might equally affirm that "All groups should be given an equal chance in life" (from the egalitarianism measure), but disagree deeply about what constitutes that equal chance and what inequities currently exist between groups. Therefore, some caution is needed when interpreting the results of self-report measures. When possible, self-report measures should be validated by assessing whether they predict relevant behavioral measures. In this study, measures of efficacy correlated strongly with

reported behavior, as did the measure of online respect. Although these behaviors were self-reported, not objectively observed, these findings provide some evidence that the self-report measures of attitudes correspond with actual behavior. Future investigations of this sort are needed, particularly for the measures of equitability.

Final Thoughts on the Dispositions/SEL Measures

The results of this exploratory study of the psychometric qualities of six measures of civic efficacy, equitability, and self-protection are preliminary, and the conclusions will be further tested in a confirmatory study. If confirmed in the second study, these results suggest that, aside from the measures of efficacy, there is considerable need for further measure development.

In particular, the measures of egalitarianism, online respect, and value of media literacy were strongly negatively skewed and were unable to discriminate among high levels of performance. These features make these measures unsuitable for use in evaluations for accountability purposes because they leave little room for improvement except among the lowest performers. That is, they are unlikely to accurately reflect meaningful civics learning among students beginning with average or above-average levels of these attributes.

There is also good news in these results. It appears that for the most part, the measures relate to one another in coherent patterns, suggesting acceptable convergence around key constructs important in civic development. The key problem, then, is not so much one of theoretical confusion as a matter of test design, though greater theoretical clarity may be needed to create items capable of discriminating at high levels of these civic attitudes and dispositions.

Appendix B

DKP 2018-19 Study: Results

Social Emotional Learning/Character Development Measure Development

Factor Structure. An orthogonal exploratory factor analysis was conducted with all items of the six core measures. This analysis yielded seven factors with Eigenvalues greater than one. Initial examination of the unrotated factors revealed that the items for each of the six measures loaded onto separate factors, with a seventh factor including two reverse-coded items (one from the value of media literacy scale, and one from the egalitarianism scale) and a single item from the equality matching measure. The three items associated with this seventh factor were eliminated from a second factor analysis using an oblique rotation and specifying six factors. Each scale formed its own factor, with all items having factor loadings greater than .40 on the scale's factor and loadings of less than .40 on all other factors. Consequently, scores were calculated for each measure separately after excluding the three items discussed above.

Efficacy.

Internal Efficacy. The measure of internal efficacy (Schulz et al., 2010) included six items, which demonstrated high internal reliability (Cronbach's α = .90). Clark and Watson (2019) note that Cronbach's alpha is biased in favor of longer scales, and recommend examination of the average inter-item correlation (AIC), which should be greater than .15. The internal efficacy scale had an AIC of .616.

In addition to assessing internal reliability, the measure was assessed using IRT. Given the current goal of assessing the measure overall, rather than individual items, the most important result of the IRT analysis is the test information curve. The test information curve portrays the informativeness of the measure at different levels of the underlying construct, in this case internal efficacy. Ideally, a measure would include items that would discriminate among participants at low and high levels of a construct, meaning that the test information curve should cover both positive and negative values (Clark & Watson, 2019). For the internal efficacy measure, the area under the curve was primarily between the values of -2 and 1.5 (Individual item thresholds ranged from -1.99 to 1.38), suggesting that the measure is informative at high and low levels, though less informative at the higher end of the scale.

Scores on this measure were positively correlated with all other core measures except for the measure of egalitarianism (see Table 3). Scores were not related to self-reported political liberalism or participants' self-reported racial/ethnic identity. Participants identifying as male (M = 3.62, SD = 0.89) reported higher levels of internal efficacy than those identifying as female (M = 3.26, SD = 1.02; $F(1, 701) = 22.03$, $p < .0001$, $R^2 = .030$)[1].

As expected, internal efficacy was positively related to secondary measures of efficacy included in the efficacy-focused version of the survey (n = 238; see Table 4), including political voice (Lopez, Levine, Both, Kiesa, Kirby, & Marcelo, 2006), involvement in civic activities

[1] For analyses examining gender and racial/ethnic differences, participants selecting the "other" option are excluded due to the small number of participants in this category and its lack of clear coherence. Participants identifying themselves as Native American were additionally excluded from analyses of race/ethnicity due to their small number (n = 8).

(Lopez et al., 2006), and participation in electoral activities (Lopez et al., 2006). However, internal efficacy was not significantly related to one of the secondary efficacy measures, civic duty (Zaff, Boyd, Li, Lerner, & Lerner, 2010). With the exception of civic duty, all other secondary efficacy measures were more strongly correlated with internal efficacy than the core measures in the equitability and self-protection domains.

The 12-item civic duty measure focuses more than the other efficacy measures on the motivation for prosocial civic action (e.g., "It is important for me to contribute to my community and society," and "When I see someone being taken advantage of, I want to help them"). This difference in focus may account for the failure of this measure to correlate with internal efficacy, which focuses more on self-perceived capacity for civic action.

Citizenship Self-Efficacy. The measure of citizenship self-efficacy (Schulz et al., 2010) had high internal reliability (Cronbach's α = .85; AIC = .46). The IRT analysis yielded a test information curve ranging from -2 to 2 (Individual item thresholds ranged from -1.89 to 1.98), suggesting that the scale is informative at all but the highest and lowest levels of citizenship self-efficacy.

Citizenship self-efficacy was positively related to all other core measures except for egalitarianism. Like internal efficacy, civic self-efficacy was not related to political liberalism, but it did differ across racial/ethnic groups ($F(3, 687) = 2.83$, $p = .037$, $R^2 = .012$). Specifically, participants identifying as Black ($M = 3.34$, $SD = 0.97$) reported higher citizenship self-efficacy than participants identifying as White ($M = 3.05$, $SD = 0.88$; $t = 2.91$, $p = .003$). In addition,

males reported higher levels (M = 3.26, SD = 0.86) than females (M = 3.01, SD = 0.91; $F(1, 701) = 11.65$, $p < .001$, $R^2 = .016$).

Citizenship self-efficacy was positively correlated with all secondary measures of efficacy, including civic duty (see Table 4). It is not clear why citizenship self-efficacy, which addresses perceived ability to carry out specific civics-related tasks, but not internal efficacy, which addresses general confidence in one's capacity for civic engagement, positively predicts civic duty.

Multiple regression analyses. To assess the unique contributions of each of the core measures of efficacy to the secondary measures, each secondary measure was regressed on the two core measures of efficacy in a series of multiple regression analyses (see Table 5 for full results). As suggested by the correlation analyses, civic duty was positively predicted by citizenship self-efficacy but not internal efficacy. Internal efficacy and citizenship self-efficacy both had unique positive relations with political voice, civic activities, and electoral activities. For political voice and civic duty, citizenship self-efficacy was a stronger predictor than internal efficacy, but this pattern was reversed for both civic and electoral activities.

Table 3.

Relations Among Core Measures

	Citizenship Self-Efficacy	Internal Efficacy	VML	Online Respect	Equality Matching	Egalitarianism
Mean, *SD*, 95% CI	3.10 (0.90) [3.03, 3.17]	3.39 (0.99) [3.32, 3.46]	3.97 (0.61) [3.93, 4.02]	4.24 (0.70) [4.19, 4.29]	3.40 (0.65) [3.35, 3.45]	4.33 (0.77) [4.27, 4.39]
Political	-.02	.03	.17****	.03	.06	.24****

Liberalism						
Egalitarianism	.03	.00	.22****	.29****	.17****	.83
Equality Matching	.12***	.09**	.26****	.22****	.60	
Online Respect	.17****	.17****	.33****	.85		
VML	.29****	.39****	.76			
Internal Efficacy	.69****	.90				
Citizenship Self-Efficacy	.85					

Notes: Correlations reflect the full sample (N = 736); Cronbach's alpha coefficients for each scale are presented on the diagonal. Value of Media Literacy (VML)
* $p < .05$, ** $p < .01$, *** $p < .001$, **** $p < .0001$

Table 4.
Relations Among Core and Secondary Measures of Efficacy, Equitability, and Self-Protection

	Citizenship Self-Efficacy	Internal Efficacy	VML	Online Respect	Equality Matching	Egalitarianism
Political Voice[a]	**.46****	**.41****	.12*	-.01	.05	.01
Civic Duty[a]	**.20****	**.05**	.41****	.45****	.30****	.52****
Civic Activities[a]	**.33****	**.36****	.19**	.20**	.07	.07
Electoral Activities[a]	**.45****	**.54****	.12	.09	-.00	-.04
Media Locus of Control[b]	.23***	.29****	**.35****	**.19****	.17**	.12

Online Harassment Perpetration[b]	.16**	.04	**-.08**	**-.25****	.04	.02
Online Harassment Victimization[b]	.24****	.15*	**-.02**	**-.17****	.03	.04
Justice Oriented Citizenship[c]	.35****	.38****	.61****	.45****	**.34****	**.36****
Social Dominance Orientation[c]	-.02	-.17**	-.36****	-.41****	**-.19****	**-.52****

Notes: Sample sizes, noted below, differ across the survey versions focused on efficacy, self-protection, and equitability. Correlations of core and related secondary measures are in bold font.

[a] Efficacy version (n = 238); [b] Self-protection version (n = 248); [c] Equitability version (n = 231)

* $p < .05$, ** $p < .01$, *** $p < .001$, **** $p < .0001$

Table 5.

Contributions of Core Efficacy Measures to Secondary Measures

	df	t	p	β 95% CI	$R^2_{Adjusted}$
Civic Duty					.043
Internal Efficacy	1, 233	-1.62	.1063	-0.13 [-0.30, 0.02]	
Citizenship Self-Efficacy	1, 233	3.44	.0007	0.29 [0.12, 0.45]	
Political Voice					.225
Internal Efficacy	1, 233	2.45	.0149	0.18 [0.03, 0.33]	
Citizenship Self-Efficacy	1, 233	4.37	< .0001	0.33 [0.18, 0.48]	
Civic Activities					.138
Internal Efficacy	1, 233	3.10	.0022	0.25 [0.09, 0.40]	
Citizenship Self-Efficacy	1, 233	2.04	.0425	0.16 [0.00, 0.32]	

Electoral Activities				.308
Internal Efficacy	1, 233	6.07	< .0001	0.44 [0.29, 0.57]
Citizenship Self-Efficacy	1, 233	2.23	.0268	0.16 [0.01, 0.30]

Equitability.

Egalitarianism. The egalitarianism measure (Diemer et al., 2017) had good internal reliability (Cronbach's α = .83; AIC = .56). The IRT analysis yielded a test information curve ranging from just below -2 to just above 0 (Individual item thresholds ranged from -2.66 to .049), indicating the the measure is primarily informative at low levels of egalitarianism.

Egalitarianism was strongly positively related with political liberalism, and female participants (M = 4.41, SD = 0.71) had higher scores than male participants (M = 4.17, SD = 0.85; $F(1, 701) = 17.07$, $p < .0001$, $R^2 = .023$). There were no differences in egalitarianism across racial/ethnic groups. The egalitarianism measure positively correlated with the core measures of self-protection and with the other equitability measure (i.e., equality matching), but it was not related to either core measure of efficacy (see Table 3). As expected, egalitarianism was significantly correlated with the two secondary measures of equitability (see Table 4), justice oriented citizenship (positively) and social dominance orientation (negatively).

Equality Matching. The measure of equality matching demonstrated only moderate internal reliability (Cronbach's α = .55, AIC = .19), but it demonstrated a broad test information curve ranging from about -3 to 2 (Individual item thresholds ranged from -3.90 to 3.54).

Equality matching was not significantly related with political liberalism or gender. There was a significant effect of participant racial/ethnic identity ($F(3,687) = 3.05$, $p = .027$, $R^2 = .01$). This effect was driven by lower equality matching scores among participants identifying as Latinx ($M = 3.21$, $SD = 0.71$) relative to those of participants identifying as White ($M = 3.44$, $SD = 0.64$; $t = -2.83$, $p = .004$). No other pairwise comparisons were statistically significant. Equality matching positively correlated with all core measures, including those of efficacy, and it was also significantly related to the two secondary measures of egalitarianism, justice oriented citizenship (positively) and social dominance orientation (negatively). However, all other core measures were more strongly related to justice oriented citizenship than was equality matching, and three core measures (value of media literacy, online respect, and egalitarianism) were more strongly related to social dominance orientation.

Multiple regression analyses. The two secondary measures of equitability, justice oriented citizenship and social dominance orientation, were regressed on both egalitarianism and equality matching. Both measures of equitability uniquely predicted both justice oriented citizenship (positively) and social dominance orientation (negatively). Each measure accounted for similar amounts of variation in justice oriented citizenship, but egalitarianism, unsurprisingly, was more strongly related to social dominance orientation than was equality matching (see Table 6).

Table 6.
Contributions of Core Equitability Measures to Related Secondary Measures

	df	*t*	*p*	β	95% CI	$R^2_{Adjusted}$

Justice Oriented Citizenship					.216
Egalitarianism	1, 228	5.55	< .0001	0.32 [0.21, 0.44]	
Equality Matching	1, 228	5.10	< .0001	0.30 [0.18, 0.41]	
Social Dominance Orientation					.289
Egalitarianism	1, 228	-9.16	< .0001	-0.51 [-0.62, -0.40]	
Equality Matching	1, 228	-2.20	.0291	-0.12 [-0.23, -0.01]	

Self-Protection.

Online Respect. The measure of online respect had high internal reliability (Cronbach's α = .86, AIC = .46). The test information curve ranged from about - 3 to just over 0 (Individual item thresholds ranged from -3.31 to 0.34), suggesting that the measure is primarily informative at the lowest levels of online respect.

Online respect was not related to either political liberalism or racial/ethnic identity, but it was higher among female participants (M = 4.30, SD = 0.69) than male participants (M = 4.14, SD = 0.70; $F(1,701) = 7.64$, $p = .005$, $R^2 = .010$). It related positively with all other core measures, and negatively with both online harassment perpetration and victimization, two of the three secondary self-protection measures. However, online respect did not relate to the measure of media locus of control, a secondary self-protection measure focused on critical media engagement.

Value of Media Literacy. The value of media literacy measure demonstrated acceptable internal reliability (Cronbach's α = .76, AIC = .35). The test information curve ranged from

about -3 to about 1 (Individual item thresholds ranged from -5.50 to 0.86), suggesting the measure is primarily informative among participants who place the lowest value on media literacy.

Value of media literacy was positively related with political liberalism, but it was not related to either gender or racial/ethnic identity. All of the core measures were positively correlated with value of media literacy, as was the secondary self-protection measure of media locus of control. However, neither online harassment perpetration nor victimization were related to value of media literacy.

Multiple regression analyses. The two measures of online harassment (perpetration and victimization) and the measure of media locus of control were simultaneously regressed on online respect and value of media literacy. Both measures of online harassment were significantly predicted (negatively) only by online respect, but media locus of control was predicted (positively) by both value of media literacy and, to a lesser extent, online respect (see Table 7).

Table 7.
Contributions of Core Self-Protection Measures to Related Secondary Measures

	df	*t*	*p*	β 95% CI	R^2_{Adjusted}
Online Harassment Perpetration					.058
Value of Media Literacy	1, 245	-0.50	.6186	-0.03 [-0.15, 0.09]	
Online Respect	1, 245	-3.94	.0001	-0.24 [-0.37, -0.12]	
Online Harassment Victimization					.023

Value of Media Literacy	1, 245	0.26	.7929	0.01 [-0.10, 0.14]	
Online Respect	1, 245	-2.78	.0059	-0.17 [-0.30, -0.05]	
Media Locus of Control					.132
Value of Media Literacy	1, 245	5.34	< .0001	0.32 [0.20, 0.44]	
Online Respect	1, 245	2.13	.0340	0.12 [0.00, 0.24]	

Appendix C: DKP Civic Action Project

Example Rubric for Civic Action Project (for teacher use)

Name: _____Grade: _____ School: _____

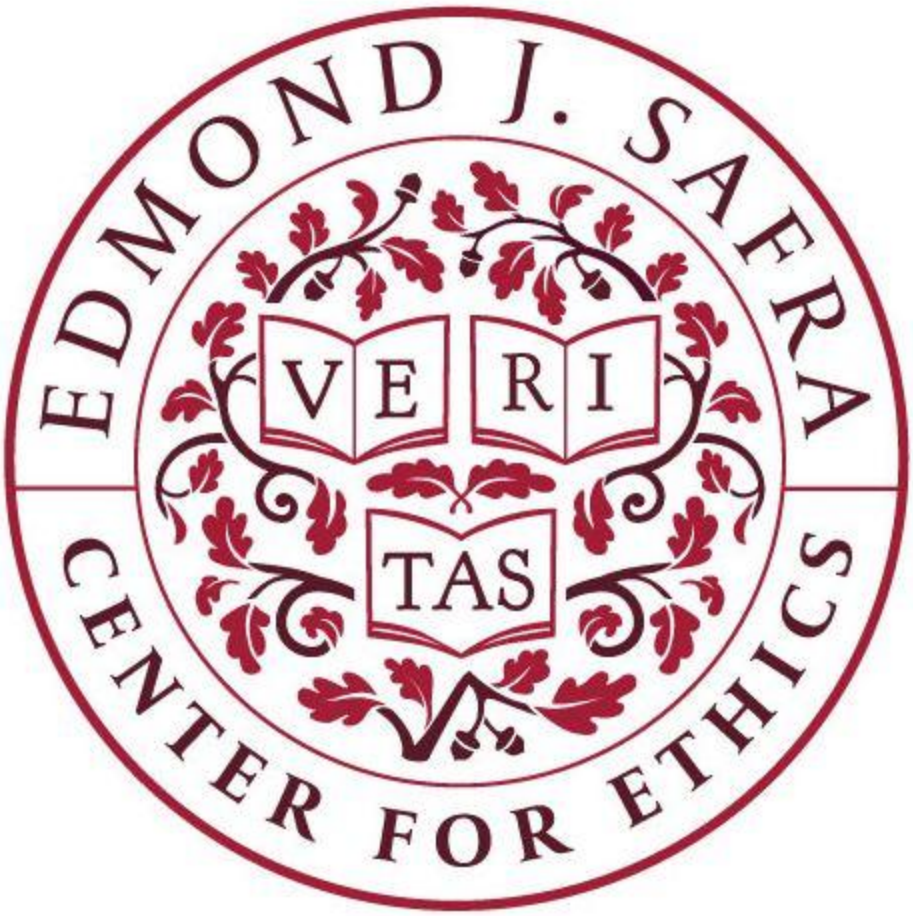
Civic Action (Voice-Influence) Project			
A. Content	3 = Wow!	2 = Almost got it	1 = Not yet
Identify the Issue [A1]: The changemaker identifies what matters and why. Issue is defined for audience.	Clearly connects issue with its impacts on the student or with a particular set of values.	Provides vague or circular explanation for why the issue matters to student	Superficial answer that restates the problem but does not explain why the problem matters to them.
Assess Risks [A2]: The changemaker assesses risks one might face if he or she were to take a public stand on the issue, before action, and affirm of risk they are willing to embrace.	risk to the student is clearly defined in terms of impact, source, or means the student might use. It is clear that the student understands what they would be facing.	risk to self is somewhat well defined in terms of impact, source, or means the student might use. There is a clear risk to the student.	superficial, vague answer that does not clearly specify the risk to the student; risk is defined only as

			disagreement (not a clear threat)
Identify Audience [A3]: The changemaker takes the issue from "I" to "we" and expands the network of engagement for oneself and peers.	Identify three *discrete* target audience groups with concrete rationales to show how and why these audiences are pertinent to the issue; describe *specific strategies* for reaching to them.	Identify three target audience groups, but they are not completely discrete; provide rationales to show how and why these audiences are pertinent to the issue; describe strategies for reaching to them, but they are vague and circular.	Superficial and general audiences; the rationales are missing or vague; the strategies for reaching out are also missing or vague or unrealistic.
Investigate [A4]: The changemaker examines key concerns of the issue and articulate their rationale for change. **Refine your message [A5]:** The changemaker revisit refines one's message after investigation.	Synthesizes evidence from more than three (no more than six) credible sources with different perspectives to connect to a specific issue. Provide the concrete rationales for the source credibility.	Analyzes evidence from at least three credible sources with different perspectives with superficial connection to an issue. Provide rationale for the source credibility, but they are somewhat vague and circular.	Unable to identify credible media sources or make a connection between the source and an issue.
Determine Realistic Goals of Action [A7]: The changemaker determines the realistic goals to achieve, and choose effective forms of action—whether for voice, or influence, or both—to achieve the goal.	Describe the type of their project (voice-oriented, influence-oriented, ro both) and provide a concrete explanation of why they choose the particular type in relation to the goals of their project; identify three specific and realistic goals the student would want to achieve.	Describe the type of their project (voice-oriented, influence-oriented, ro both) but unable to provide a concrete explanation of why they choose the particular type in relation to the goals of their project; identify three goals the student would want to achieve, but they are less concrete or unrealistic.	Unable to describe a specific type of their project; unable to identify the three goals to achieve, and if so, they are vague and unrealistic
Choose Means [A7]: The changemaker chooses effective tools that one can use to achieve the goal:	Identify a list of means, more than three kinds, that the students might use; detail a specific analysis of pros and cons of each means, and strategize how to use different tools and methods for different purposes or target audiences.	Identify mean, less than three kinds, that students might use; detail some rationales to choose the particular means, but involve no specific analysis of pros and cons of each mean. Strategies are provided, but still general and vague.	Unable to identify specific means; if so, its connection to the achievement of goal is vague and unrealistic. No strategic plan for usage is provided.
B. Organizing			
Planning/Logistics [B1]: The changemaker organizes time effectively, as well as necessary follow-through in communication.	Lay out details of the project management, including a specific and reasonable timeline (by days and weeks), division of labors and person in charge for each task (in a group	Lay out details of the project management, but they lack of clarity in the timeline, division of labors, logistics, and check-in point. The timeline might be unrealistic; communicate with	Unable to lay out a workable plan for the project. Unable to communicate effectively with other team

	project), and specific logistics that each team member should follow, and check-in points; communicate successfully with other team members (in a group project) to check a workflow in a timely manner; able to cope successfully with unexpected minor issues and make proper adjustments in one's plan.	other team members (in a group project) to check a workflow, but the student misses some important elements. Have difficulties in coping with unexpected minor issues and unable to make proper adjustment in one's plan.	members (in a group project); unable to cope with unexpected changes.
C. Product			
Quality [ ] : The changemaker successfully incorporates all elements of Content (A) into a format that is presentable, and then is presented to target audience.	The final product is cohesive and relevant to the topic that student chose.		
Accuracy/Professionalism [ ] : The changemaker demonstrates command of standard English grammar, as well as the conventions of capitalization, punctuation, and spelling. The changemaker correctly cites documents and has Works Cited page in MLA format			
D. Reflection	/4	/4	/4
Reflection [D]: The changemaker completed written reflection using prompts.	/4	/4	/4

Example Rubric for Civic Action Project (for student reflection)

Civic Action (Voice-Influence) Project		
A. Content	**Self Assessment ✔ or NY**	**Instructor Assessment ✔ or NY**
Identifying the Issue [A1]: The changemaker identifies what matters and why. Issue is defined for audience.		
Investigate [A2]: The changemaker examines key concerns of the issue and articulate their rationale for change in their language.		
Assess Risks [A3]: The changemaker assesses risks one might face if he or she were to take a public stand on the issue, before action, and affirm of risk they are willing to embrace.		
Identify Audience [A4]: The changemaker takes the issue from "I" to "we" and expands the network of engagement for oneself and peers.		
Choose Means [A5]: The changemaker chooses effective tools that one can use to achieve the goal.		
Determine Goals of Action [A6]: The changemaker determines effective forms of action—whether for voice, or influence, or both—to achieve the goal of participation.		
B. Organizing		
Planning/Logistics [B1]: The changemaker completes organizing sheets for appropriate format.		
Check-in (Implementation) [B2]: The changemaker organizes time effectively, as well as necessary follow-through in communication.		
C. Product		
Quality [ ] : The changemaker successfully incorporates all elements of Content (A) into a format that is presentable, and then is presented to target audience.		
Accuracy/Professionalism [ ] : The changemaker demonstrates command of standard English grammar, as well as the conventions of capitalization, punctuation, and spelling. The changemaker correctly cites documents and has Works Cited page in MLA format		
D. Reflection		
Reflection [D]: The changemaker completed written reflection using criteria for success guide.		



QUESTIONS?

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