CivXNow
A PROJECT OF iCIVICS

L1STEN
LISTEN FIRST PROJECT

Uncharted Waters

Education, Democracy, and Social Cohesion in the Age of Artificial Intelligence

March 2024

The following report was created as a product of members of the CivXNow and Listen First coalitions. These insights should be interpreted as a general collective consensus of our learning, not the individual views of a person nor the stance of their organization. We would like to thank the following members of the working group for their contributions.

Dariya Brown	College Board
Zachary Cote	Thinking Nation
Rashid Duroseau	Democracy Prep Public Schools
Laura Hamilton	American Institutes for Research
Jane Hatterer	DemocracyReadyNY/League of Women Voters of NYC
Paul Lekas	Software & Information Industry Association
Ebonee Otoo	News Literacy Project
Abishek Raman	American Academy of Arts and Sciences
Lindsay Semph	NCTE (National Council of Teachers of English)
Mark Stolan	New Tech Network
Janet Tran	Ronald Reagan Presidential Foundation

Suport staff:

Deborah Bitanga, iCivics
Tim Caspersen, iCivics
Abbie Kaplan, iCivics
Ace Parsi, iCivics
Karissa Raskin, Listen First

Introduction

"We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness." —Declaration of Independence (US 1776)

There is probably no better sentence to situate at the intersection of artificial intelligence (AI), civics, social cohesion, and our own humanity. In this prominent sentence of one of our nation's founding documents, we are reminded of several core principles that have guided civilizations long before Thomas Jefferson put pen to parchment at his desk during that hot 1776 Philadelphia summer.

First, "all men are created equal." The equality inherent to our humanity has perhaps never been realized in human institutions, and yet there it is, standing as a moral apex for us to spend our lives pursuing.

Second, "they are endowed by their Creator with certain unalienable Rights." Here, the belief in an actual Creator is secondary to the sentiment that our rights exist outside of our individual accomplishments, our family status, or our community association. We have rights because we are human.

Third, "these are Life, Liberty, and the pursuit of Happiness." While we do not have the time to dive into these three separately, we must ask the deeper questions of what defines and sustains life, what is encompassed by liberty, and how can we pursue happiness?

Lastly, all of the above "truths" are "self-evident." This may not mean that they are clear, however, as Harvard political scientist Danielle Allen points out in Our Declaration: A Reading of the Declaration of Independence in Defense of Equality (2014): "It means instead that if you look into the proposition, if you entertain it, if you reflect upon it, you will inevitably come to affirm it." In short, our ability to reason gives us the opportunity to recognize when something is self-evident.

As artificial intelligence becomes commonplace in education, it is critical that we take the time to clearly express how we can best use and not abuse its use to build, equip, and sustain a civil society. The opening sentence of the preamble of the Declaration of Independence can provide a pathway for us to think in both civic and human terms about the best way forward.

The Declaration asserts that within humanity, there is inherent equality. This equality transcends race, ethnicity, religion, neurological or physical ability, sex, economic status, or any number of other factors. Coupled with this equality are unalienable rights, once again not attached to any particular identity or social status. As the Declaration goes on to argue, "to secure these rights, Governments are instituted among Men." This means that even though we do not grant ourselves equality or rights, it is our duty to work together to secure these rights for all people within our democratic society.

A practical look at the potential of AI acknowledges that there are many ways that AI can facilitate our ability to do this, as well as many ways that AI can detract from or even harm our ability to do this. As a community, we must be willing to honestly think through the various uses of AI and its implications in order to successfully wield its power without compromising our own humanity.

This paper and its associated resources aim to start that conversation for the civic learning and bridging communities. It aims to examine how—through practice, policy, and research—we can leverage AI to better our social cohesion and democracy while actively preventing the opposite. It is organized by starting with the function and outcomes of quality civic learning, and how they are impacted by and impact artificial intelligence. We then discuss key considerations that ought to inform practice and policy actions and end with unresolved, important questions we must pursue as a field.

It may go without saying today, but for future audiences it may be worth noting that human beings wrote this piece with imperfect information and insights. We learned from one another, debated different approaches, and made our best consensus and imperfect recommendations on executing our educational, social, and democratic responsibilities to our youth today to fulfill our greatest promise tomorrow. This piece and its associated materials intend to be a living document to start conversations—not the final word. We share this with optimism and hope that the reader takes it in with generosity, interpreting, discussing, and adapting the principles of this document.

The North Star: Timeless Civic Knowledge, Skills, Dispositions, and Behaviors

It is important to first lay out what we feel are the core responsibilities of the civic education and bridging fields, regardless of the tool and the context deployed. What does success mean to us as it relates to our youth?

We were reassured by the fact that the lion's share of the knowledge, skills, dispositions, and behaviors we affirm today is not only what our predecessors would have articulated before the invention of artificial intelligence but before the invention of the internet and other modern tools. And yet, we also noted that our fields and work are by no means immune to the broader social and technological changes in our society. In other words, while much of the knowledge, skills, dispositions, and behaviors of focus may be timeless—they affect and are deeply affected by social and technological developments unfolding at this point in time. Below, we articulate some examples and how we anticipate AI may affect them.

	Potential Positive Effects of AI	Potential Negative Effects of AI
Civic Knowledge Ex: History, heritage, knowledge of institutions, etc.	Provide simulations and opportunities to engage in deeper, more digestible learning of historical events.	Distort historical events and expand misinformation.
Civic Skills Ex: Information literacy, assessing the reliability of sources, collaborating across differences, etc.	Prioritize the importance of skills as civic outcomes and be a tool to aid the application of skills.	Raise the bar for how skills are applied and make the application more difficult
Civic Dispositions Ex: appreciation of free speech, curiosity, civility, etc.	Help facilitate "low-risk" access to different perspectives (e.g., building skills in strong disagreement with technology).	Breed greater distrust and division.
Civic Behaviors Ex: informed voting, serving on juries, volunteering, etc.	Make opportunities that undergird civic behaviors more inclusive.	Undermine trust and human connection that undergirds civic behaviors.

Knowledge.
We want to underscore that historical and civic knowledge is the very foundation upon which all other outcomes rest. It is not enough to have the skill of independent thinking if one does not first have the knowledge to engage in that thinking. Free speech will be constructive, civil speech when grounded in a shared understanding of historical and civic facts.

AI can help put historical events in accessible language, enable young people to interrogate and debate avatars of historical figures and ideas, and make communicating one's understanding to diverse audiences more accessible. Quality teachers and quality teaching are more important than ever to help students build and interrogate—including leveraging AI tools when pedagogically beneficial —the foundational historical knowledge needed to navigate our modern realities.

However, much like human intelligence, we have learned and seen that artificial intelligence is by no means immune to distortions, misinformation, and incorrect assessments of historical events. Indeed, it is not only prone to such pitfalls; it can promulgate such at a greater scale and with an authoritative voice.

Skills.
A comprehensive civic education must include both knowledge and skills. It's worth noting the obvious that today's students have more ready access to information than any generation before them. What would have taken Alexander Hamilton and Frederick Douglass hours, if not days, to find and learn through a primary source, students today can access in moments. Access to information is not enough—students must have the skills to distill that information, assess its credibility, and use it to collaborate with those they may disagree with in exercising their civic rights and responsibilities.

To that end, AI and the underlying machine learning have the potential to deepen misinformation and make discovery more individual and less communal, but can also be trained to reduce and counteract misinformation and serve as the fodder for collective brainstorming. Both things can happen, and the skills educators help instill in their students and the social implications of policymakers' decisions to support the developments of AI's positive and prevent negative implications for democracy will affect the outcomes.

Dispositions.
As advancements in AI capacity accelerate and enable AI systems to better mimic human knowledge applications and skills, the value and emphasis of civic dispositions will increase in their importance. Recent research highlights that as AI tools become more pervasive, they can impact the quality of trust between human beings and the social fabric that supports their interaction. Algorithms have long been criticized for their capacity to reinforce and calcify political views and biases, and recent analyses of AI capabilities show that AI can both generate and combat hate speech. Given these realities, educators must focus more on preparing youth with pro-social dispositions of open-mindedness, curiosity, and civility. AI tools can also benefit efforts by providing opportunities for students to debate opposing viewpoints and understand those with different perspectives in lower-risk ways.

Behaviors.
The implications of AI for the knowledge, skills, and dispositions highlighted above will certainly affect the civic behaviors valued in our constitutional democracy. From voting to serving on juries and volunteerism, AI could have both positive and harmful implications. On the one hand, it could empower people to enter conversations that would have required a breadth of disciplinary knowledge; On the other hand, it could undermine people's trust in each other and institutions and deepen biases already present in our society. Much like the knowledge, skills, and dispositions addressed above, there is no inevitability in either outcome—it will only be a product of our intentionality with educational decisions we face and will present in the subsequent section.

Conditions Influencing Our Actions

Much like other aspects of our lives—be it how we shop, work, and connect with each other--artificial intelligence will impact how and what we teach and learn. For AI to evolve ways that support knowledge, skills, dispositions, and behaviors that advance social cohesion and strengthen our constitutional democracy, we suggest that policy and practice investments be evaluated on their success at positively affecting the following seven lenses:

1. **Ethics** —Because the increased power of and access to many technological tools will have transformational implications for the world students live in today and will inherit, young people must have exposure to different tools, a voice in informing the tools under consideration, and each exposure should precede with learning and engaging dialogue about the ethical use of those tools, including what it means to be human as tools are deployed.
2. **Learning Change** —Because technology evolves at an exponential rate and the flow of information persistently expands, the ethical conversations around the use of tools and approaches to learning must similarly remain flexible and dynamic.
3. **Learning Primacy** —Because access to quality insights and misinformation has expanded exponentially, rather than recalling answers to closed questions, education must deliberately equip students with skills to process, analyze, evaluate, and interrogate information through deep inquiry.
4. **Community Capacity** —Because, on the whole, human beings are drawn to reinforcing views and experiences both neurologically and through algorithms (i.e., through information, searches, virtual communities, etc.), education and educators must be intentional in offering opportunities for collaborative work across differences and empowering students to deepen their connections with others.
5. **Relationship with Media** —Because individuals in our modern society are not simply passive consumers of information but active consumers and producers of various information, misinformation, and modes of media, education must prepare students in essential media and digital literacy skills that better themselves, peers, communities, states, and the nation.
6. **Assessment** —Because more powerful search engines and AI tools can easily provide answers to test questions and even generate essays, developers and users of assessments will need to evaluate what knowledge, skills, and dispositions they are trying to measure and for what

purpose, and then take steps to ensure that AI tools are used in ways that enhance rather than detract from validity. For instance, efforts to gauge content mastery might benefit from formats such as public presentations to teachers, peers, families, and communities.

7. **Disciplinary Emphasis** —Because technological advancements have many common implications across disciplines (e.g., the need for information literacy, the reduction of human contributions to AI outputs that would have demanded basic disciplinary expertise, etc.), educators must collaborate across disciplines to reinforce learning with interdisciplinary relevance and coherence. *We cannot put too fine a point on this: digital literacy and its implications for preparation for democracy must become a cross-curricular, interdisciplinary imperative.*

Amidst the changes AI introduces, the familiarity of proposed recommendations may provide some comfort to the reader. Our group still believes that, in addition to the Educating for American Democracy principles articulated below, the Six Proven Practices for Effective Civic Learning are relevant and necessary today. We still hold that the consensus recommendations that inform the CivXNow State Policy Menu are effective instruments to account for the current changes. What we propose and elaborate on below is the need to have these practices and policies applied through the lens of the seven above areas so they can advance the knowledge, skills, dispositions, and behaviors necessary to help support the development of engaged, informed members of our constitutional democracy in light of the technological advancements of AI.

Educational Practice for Democracy in the Age of Artificial Intelligence

The Educating for American Democracy Pedagogy Companion (2021) articulated the following six proven, research-based principles that, when implemented effectively, translate to success in classrooms and schools nationwide:

1. **Excellence for All.** Educators focus on inclusion and equity in both content and approach, increasing in complexity and depth in understanding of relevant history and contemporary issues as students advance in grades.
2. **Self-Reflection and Growth Mindset.** Educators engage in continuous self-reflection and cultivate self-knowledge for themselves and their students.
3. **Invest in Classroom and School Climate.** Educators and schools help set a culture of high expectations and cultivate student ownership and responsibility for learning.
4. **Inquiry as the Primary Mode of Learning.** Educators center inquiry in their teaching practices, and in the process help students to develop empathy across differences and curiosity to ask difficult questions.
5. **Practice of Constitutional Democracy and Student Agency.** Educators create opportunities to engage in real-world events and problem solving on issues in their communities and taking informed action in the process.
6. **Assess, Reflect, and Improve.** Educators center on-going assessment and reflection for students as they learn.

As our group discerned what AI means in light of these practices, we noticed several inherent strengths given what AI introduces:

- Principle 1 helps lay the foundation for institutions and historical events—including the history of opportunities and challenges with other transformative innovations—to help young people make informed decisions and engagements in civic life and more deeply consider and integrate their own context and experiences in the process.
- Principles 2 and 6, highlight that learning with AI is an ongoing process in which it's incumbent on educators and learners to consistently reassess and adjust their practice and learning.
- Principles 3, 4, and 5 provide students opportunities to apply their understanding in meaningful ways and center the importance of inquiry on essential questions rather than fixed answers.

The combination of knowledge, relevance, and application inside and outside of the classroom are particularly powerful because it helps students act from a strong foundation; places them as relevant actors in discussing and informing issues that affect them; deepens relationships between students, peers, and adults; and enables dynamic interactions and deep inquiry around issues with multiple solutions and dimensions. AI will affect these practices by demanding a greater emphasis on information literacy, independent thinking, and individual relationships, and facilitate new opportunities for ongoing assessment of learning.

As a 2023 guidance for schools articulates and our work affirms, AI can provide benefits (e.g., differentiation, aiding creativity and collaboration, and assessment) and pose risks (e.g., plagiarism, privacy issues, and diminished human agency) to education.

These benefits and risks apply to the aforementioned proven principles. For example, when misused, AI can do students' work, create more misinformation, and weaken relational bonds between them. The challenging implications for civic learning and social cohesion can be staggering. However, AI can also make complex civic and historical concepts relatable to students of different ages, language levels, and abilities; help create more timely assessments of learning; and enable all students to engage in simulated conversations with historical figures or texts. Which outcome will come to fruition will be a matter of our capacity to engage in these conversations in ongoing and dynamic ways and engage in courageous conversations around the ethical, civic, and inherently human dimensions of learning.

Policies to support learning

It would be an understatement to note that it is no simple matter to address the modern democratic and social cohesion implications of artificial intelligence while empowering the practices and outcomes highlighted above. More comprehensive policies are required. For example, it would be naive to believe that any amount of information literacy for students could counter the advanced quality of evolving deep fakes and other misinformation. Administrative and Congressional action are needed to regulate and support content authenticity and provenance standards, especially as they relate to the functioning of our institutions and foreign and domestic misinformation designed to weaken faith in the U.S. electoral system and institutions. Privacy and data protections will affect youth and adult civic learning, civic actions, and faith in institutions supporting them.

These issues should be addressed and are appropriately raised by peers in adjacent movements. Not addressing these areas in detail in this work should not be misconstrued as a lack of support or belief that the challenges before us can be addressed with the narrow remedies we propose. It is simply to underscore that, as a coalition of educators and education advocates, the complexity of some of these remedies goes beyond our particular expertise. Secondly, without the long-term benefits of the educational actions we propose, those remedies will not achieve our collective goal of a strong and vibrant constitutional democracy in the present or future. In that spirit, we propose the following four recommendations that should be implemented in tandem with the necessary safeguards drawn around this technology.

Recommendation 1: Make a generational investment

Although AI technologies have been used for decades, the power of these tools and their availability to the general public has exploded in recent years, and will only increase. These technologies promise both extraordinary potential benefit to address societal challenges and extraordinary risk to social cohesion and democratic trust and institutions. The technological revolution has created an imperative to act now to advance civic learning across the United States. We believe the cost of inaction is steep, leading to deeper social decay and infighting, challenges in election administration, and potential for distrust and violence. We similarly believe that the benefits and needs for investment are great: a population more able to engage in collaborative problem-solving, empathy, and curiosity.

We have seen the value of investment in STEM education over the past decades, currently funded at the national level at about $50 per student. A similar investment is needed in civics and history—which currently receive about 50 cents per student—to instill in young people the civic knowledge, skills, dispositions, and behaviors fundamental to a strong and healthy constitutional democracy, including those necessary to socially navigate the implications of new and emerging technologies.

Investments in history and civics should support the following key goals and activities:

- Train educators to understand and leverage new technology tools to work across subject areas;
- Support implementation of lessons with a focus on developing responsible digital citizenship;
- Facilitate interdisciplinary and cross-curricular collaboration to support and assess information and algorithmic literacy among learners;
- Invest in new educational materials that adapt to changes young people are experiencing; and
- Empower communities to invest in schools, after-school and out-of-school programs, libraries, and other civic spaces.

We believe significant local, state, and national investments will go a long way in addressing these needs. In targeting such investments, we believe that under-resourced communities will face challenges and gain benefits from AI more acutely. As such, we recommend that funds be disbursed based on a formula that prioritizes under-resourced rural, urban, and tribal communities.

Recommendation 2: Invest in Technical Assistance and Standards in Helping Districts Plan for Responsible AI Adoption

We do not believe that money alone will lead to accomplishing our social cohesion and democracy goals. We believe the initial grantees receiving funds should receive technical assistance to help set standards for navigating the digital challenges and opportunities AI brings that can inform models and best practices to support learning and practice for other schools and districts in the future.

Recommendation 3: Invest in Standards Around AI Adoption that Sustain Social Cohesion and Student Civic Learning

We urge states to develop standards encompassing key skills of information literacy, independent thinking, communication, collaboration, and curiosity. In schools and districts, this should translate to Civic Learning Plans; in broader communities, it should translate to cross-sector collaborative plans. Given how new these technological developments are and the knowledge asymmetry between the private sector and schools, we call on funding state technical assistance centers to gather best practices, help local stakeholders develop state-defined standards in digital citizenship, and support schools and districts to navigate the new digital realities before them.

Recommendation 4: Create Recognition Programs to Validate Individual, Public, and Private Efforts

The government can not only fund youth-benefitting efforts, it can also affirm them. Strategies like Civic Seals, Presidential Medals of Freedom, and other prestigious awards and distinctions should inform and model new awards to affirm private companies that make significant investments and contributions to the public, social, and democratic good; affirm achievement for youth in ways that have meaningful value in the pursuit of personal, postsecondary, and career goals; and recognize communities for their investment in social cohesion and educational and civic innovation.

Recommendation 5: Invest in Research and Development of AI Tools to Address the Risks Created by AI

Lastly, it is important to recognize that public use of AI tools remains a relatively new social phenomenon with both foreseen and conjectured benefits and challenges. As such, we propose the support of robust research agendas to examine:

- **How artificial intelligence can inhibit or support civic learning and social cohesion among the nation's youth.** Particular areas of needed research include best practices in developing information literacy skills; how to ensure youth can bridge ideological divides; formative assessment instruments to measure AI and information literacy; and the implications of different AI tools and information vehicles on youth mental health and civic agency.
- **Development of AI tools to help combat and reduce the most pernicious consequences of misinformation, including that perpetrated by AI itself.** We are concerned by evidence that AI tools are being used at scale to sow division and undermine public trust in democratic institutions. Our best minds must continue to explore technological methods to help restore trust and bolster the work of educators.

Unanswered Questions

It is important to note that the issues AI raises for our constitutional democracy and social cohesion will continue to evolve. Indeed, some of the issues that emerge will be further exacerbated by new AI technologies, while others will be addressed by other technologies. The following are key questions that will require ongoing discussion and research by the civic learning and bridging fields. ***NOTE:*** These questions are not meant to be exhaustive but represent some important areas the advisory group recommends researchers explore as immediate and ongoing needs.

Key Questions for Further Exploration

1. **Material and Assessment Evaluation:** Which materials under which conditions are effective at developing digital literacy skills relevant to informed participation in our democracy and what are the best assessment instruments that provide this information on an ongoing basis?
2. **Standards Implementation:** How are statewide standards for AI and information literacy related to district-, school-, and classroom-level practices? What mechanisms (e.g., instructional materials and professional development) are associated with those relationships?
3. **Professional Learning:** What characteristics of professional development are associated with improved teacher capacity and student learning in digital information literacy?
4. **Student Reflections:** How does AI change the trustworthiness, reliability, or accuracy of online information, and does the change make people feel more or less inclined to participate civically in their community?
5. **Educator Reflections:** How has the ubiquity of AI changed how educators teach civic education or what they think needs to be taught in civic education (i.e., education across disciplines that relates to the development of knowledge, skills, dispositions, and behaviors essential to sustaining and strengthening our nation's constitutional democracy)?
6. **Educator Practice:** What educational practices (within or outside of formal schooling) empower students to sustain and strengthen our constitutional democracy?
7. **AI Safety:** What type of AI is less prone to misinformation (intentional and unintentional) and therefore safer to use in school environments?

Conclusion

Like all tools, AI presents users with both ethical and unethical options for its use. It is our job, however, as humans with the ability to reason, to decide where different uses fall. For instance, most of us can agree that while it would be ethical for a politician to use AI to instantly summarize the myriad of constituent concerns, it would not be ethical to use AI to create a deepfake of their opponent to win an election.

As leaders in the civics and education spaces, we know that just because something can be done, does not mean it should be. One of the core aspects of being a good citizen is to think about what is best for the community, not just oneself. At the core of that civic aim is really a question of our humanity.

As people, we are inhumane when we detract from human flourishing; we are humane when we contribute to it. These are the terms in which we should think as we consider how to harness the power of AI in a way that centers our own humanity and, conversely, how AI might be used in ways that lessens that humanity.

Unlike the slow evolution of most of human history, recent information revolutions have often caught us off guard. The internet has made us more connected to the world than ever before while at the same time disembodying us from the communities in which we live. Social media was at first seen as a beacon of hope for so many that had historically had no authoritative voice, and yet it continues to deepen polarization and tribalism, spike rates of depression, and negatively manipulate our own behavior. While incredibly helpful things will undoubtedly come from the embedding of AI into our everyday lives, we cannot be naive regarding its underside. This is why the civics community, leaders, and everyday citizens must choose to stand together with the promise to think deeply and in community about any future uses of AI in education spaces. When done thoughtfully, we are optimistic about the prospects for the future and the inclusive democracy our youth will help create and inherit.