Civic Learning, Civility, and Technology

For artificial intelligence (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 teaching and learning lenses.

Teaching and Learning Lens	Changes Invited by Advances in Technology and Generalized Artificial Intelligence
Ethical Implications	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 and a voice in informing the tools under consideration. Each exposure should be preceded by learning and engaging in dialogue about the ethical use of given tools, including what it means to be human as tools are deployed.
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.
Community Capacity	Because, on the whole, human beings are drawn to reinforcing views and experiences both neurologically and through algorithms (e.g., 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 connection with others.
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.
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.
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.
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.

Adapted from "Uncharted Waters: Education, Democracy, and Social Cohesion in the Age of Artificial Intelligence."