

CITE Framework

There is a universe of possibilities when it comes to integrating computing and digital literacies into work with children. Below, is framework to help faculty unpack and prioritize the concepts, practices, and perspectives that might be relevant to promote in your work.

CITE aims to support teachers to apply **equity perspectives**, and mobilize **crosscutting digital and computing practices** to enhance and transform learning and practice around traditional and expanded **teacher professional learning topics**.

CITE Equitable Pedagogy Goals, Approach, Design Principles

We want computing and digital literacies integration to be driven by the values of our broader community. But we think it is important for our community to take up values and commitments around equity. Below, we summarize the work of CITE's Equity Working Group to share what we think a **praxis of equitable pedagogy** entails.

Equitable CITE pedagogy includes a set of **goals** that operationalize the equitable processes and outcomes we care about, an **approach to design, designer mindsets**, and some **guiding principles for CITE designs and implementations**.

Our Goals

Equitable CITE pedagogy seeks to...

- empower learners and communities
- promote joyful, meaningful learning
- transform institutions towards justice

...for teachers, teacher candidates, teacher educators, P-12 students, families, and communities.

Our Approach

To meet those goals, we hope teacher engage in **affirming, learner-centered design processes** guided by **equity-focused mindsets**.

Design Principles

We hope that teachers' designs and implementations are guided by the following principles. These design principles are not checkboxes, but rather should be considered holistically together.

- **Co-learning** and **co-construction** of knowledge in communities
- **Supporting learner agency** to tinker with, modify and create tools
- Centering **creativity and expression**
- Mobilizing computing and digital tools **for social action**

- **Vetting and critiquing tools, tech and tech cultures**
- Adopting **expansive notions of learning and assessment**

Computing and Digital Practices

Computing Integrated Teacher Education means equipping teachers to **teach and learn about, with, through, and against technology**

We hope faculty help teacher candidates take up a variety of orientations towards technology as they teach and learn these literacies:

	ABOUT	WITH	THROUGH	AGAINST
For teacher learning	Teachers engage in conversations about technology, digital citizenship, and its impacts (from a user and teacher perspective).	Teachers learn with technology to help them explore concepts for themselves.	Teachers express themselves and their learning through their creation and modification of computational artifacts	Teachers to think critically about technologies to dismantle unjust tech.
To integrate into teachers' pedagogy	Teachers strategically bring these conversations to their students.	Teachers teach with technology to support student learning and participation.	Teachers prompt their students to express themselves through creation and modification of computational artifacts.	Teachers strategically bring these conversations to their students.

We're using the [New York State Digital Fluency and Computing Standards](#) as inspiration, but teacher educators might find many other computational and digital literacies relevant to their work across teacher education. Practices that CUNY faculty have found especially relevant to their contexts include:

Digital Practices

- Digitally-supported communication, participation, reflection
- Critically and ethically navigating digital information and media ecosystems
- Digital storytelling / composition

Computing Practices

- Prototyping, remixing, iterating
- Tinkering, experimentation
- Data practices
- Modeling and simulation
- Abstraction and decomposition

- Algorithms, programming, debugging

Consult our [Computing/Digital literacies](#) gallery to learn more about what faculty in the CITE initiative have taken up in their artifact designs.

Teacher Professional Learning Topics

We hope that teachers mobilize equitable pedagogical approaches, and the digital and computing literacies above to support teacher professional learning. We've decomposed teacher education into six areas, inspired by accreditation standards and the work of [Linda Darling Hammond \(2021\)](#).

1. **Learners**; learning theory, including social, emotional, and academic dimensions; and application of learning theory
2. **Creation and development of positive learning and work environments**, including understand and engaging diverse local school and cultural communities
3. **Equity and culturally responsive practice**, including intersectionality of race, ethnicity, class, gender identity and expression, sexual identity, and the impact of language acquisition and literacy development on learning, teaching strategies, materials, technology used
4. **Content**, pedagogical, and/or professional knowledge
5. **Instructional Practices and Assessment** of and for student learning, use of data to inform planning, teaching strategies, materials, technology used.
6. Dispositions and behaviors required for **successful professional practice**

We also recognize that teacher professional learning topics in the areas above have been influenced, and will continue to be influenced by digital and computing technologies and culture. This means, the areas above necessarily include tech-related topics like:

- Understanding learners' digital lives
- Digital citizenship, privacy, health, and safety online
- Assistive technology, using technology for accessibility
- Computing and digital practices across the K-12 disciplines, planning for this integration
- Advocating for learners, equity, and teachers' professional interests using digital means