

# Designing for Inclusion: What We Learned About Technology & Research

CAST partnered with K–12 education organizations to explore how UDL, accessibility, and emerging technologies can support more inclusive educational technologies and assessments. As part of this work, CAST conducted a qualitative study with 24 district leaders and assistive technology users, using UDL-informed interviews, focus groups, and asynchronous participation options to learn from their experiences. We share our findings from this study in two white papers: 1) [Designing Assistive Technology That Works in Schools: Lessons from the Field](#) and 2) [Universal Design for Learning \(UDL\) as a Lever for Inclusive and Accessible Data Collection](#).

## 1 Designing Technology That Works

- **Design for access from the start.** Accessibility is most effective when embedded into products rather than added later.
- **Features aren't enough.** Real accessibility also depends on usability, interoperability, transparency, and educator support.
- **Design assessments that measure learning, not barriers.** Accessibility in assessment depends on how the entire system functions, ensuring learners can demonstrate what they know without usability, timing, or technology barriers.
- **Design with users, not just for them.** Students, AT users, educators, families, and support staff should help shape technology decisions.
- **Think beyond compliance.** Inclusive technology should anticipate learner variability across design, procurement, and implementation.

## 2 Designing Research That Includes

- **Design multiple pathways to participate.** Options such as varied formats, advance preparation, multiple ways to respond, and flexible pacing can reduce barriers and increase access.
- **Participant experience matters.** Embedding choice and flexibility throughout the data collection process can increase autonomy, engagement, and participants' sense of being valued.
- **Inclusive design can strengthen the data collection process—and the research design more broadly.** Multiple opportunities to participate and share ideas can produce deeper reflection and richer data.
- **UDL is research infrastructure.** Inclusive research requires intentional planning, reflection, and continuous improvement.



### One idea connects both white papers:

Inclusive design is not something we add after barriers emerge. It is a way of designing from the beginning in partnership with the people who will ultimately experience what we create.

## Learn More About Our Work

At CAST, we believe access to learning begins with design. Our [resource hub](#) offers free accessibility tools, UDL-based accessibility projects, ways individuals or schools can connect with the accessibility team to support learners in their communities, and more. Including:



- [Inclusive and Accessible Assessments and Educational Technologies: Research Agenda](#): This research agenda identifies key priorities and questions for advancing inclusive assessment and curriculum design through efforts focused on building capacity, strengthening systems, designing for learner variability, and expanding inclusive and accessible research practices.
- [Interweaving Assessment in the Age of AI: Policy Implications for Advancing Innovation that Centers Learner Variability](#): Drawing on three Interweaving Assessment convenings facilitated by Menlo Education Research, this white paper examines the intersection of AI, accessibility, assessment, and learner variability, offering research, policy, and design recommendations for creating more accessible and valid assessments while highlighting important cautions and open questions.
- [Blog posts](#): Explore blog posts that connect inclusive design with today's most pressing accessibility needs including [Accessible by Design: Reimagining Assessments with Universal Design for Learning](#) and [How does my organization comply with Updated Title II ADA Requirements?](#)

## Connect with Us

These white papers are one step in CAST's ongoing exploration of how UDL can support more inclusive, accessible, and participatory research and design.

**Are you applying UDL to the design of educational technologies and/or research methods?**

We want to learn from you. Share your practices, questions, and lessons learned as we work together to advance these growing areas of research.

Connect with CAST at [cast.org/contact](https://cast.org/contact)

