



Center on
Inclusive Technology
& Education Systems

We've Got our CITES on Inclusive Technology

bit.ly/InData25_Homebase



Session Facilitator



Michelle Soriano

Technical Assistance Specialist

CAST

msoriano@cast.org

X: @MichelleEDUC8

Accessibility Commitment

Understandable

- Clear structure and layout
- Consistent formatting
- Effective use of images

Robust

- Checked for accessibility using an accessibility check built into PowerPoint

Perceivable

- Alt text on images
- High color contrast
- Readable font

Operable

- Distinct slide titles
- Shortened links with descriptive back-halves

Creative Commons



Resource created by [The Center on Inclusive Technology & Education Systems](#) at [CAST](#) and licensed under a [Creative Commons Attribution 4.0 International License](#). All other rights reserved related to third party content. Resource contact(s): [AEM Team](#).

The Why



Dear Teachers...



Today's Objectives

Together we will...

- Explore and engage with the CITES framework
- Create action steps to begin to create and sustain inclusive technology systems.

Reflect, what are your goals for our time together today?



Home Base

The home base document is your one-stop-shot to all session materials and summaries of content.

bit.ly/SXSW2024_CITESframework



Calibration Conversations: Linking to Promote Inclusive Technology Leadership

Logistics

[Logistics](#)

[Agenda](#)

[Resources](#)

[Speakers](#)

[Content](#)

[District Level Practices](#)

[Educator Level Practices](#)

[Closing](#)

Agenda

1. Welcome and Logistics
2. Discuss the What & Why of Inclusive Technology
3. Explore the How - the CITES Framework
4. Wrap up with some fun!

Resources

- [Slide deck](#)
- [CITES Website](#)
- [CITES Family Engagement Literature Review](#)
- [CITES Family Engagement Practices](#)

Speakers

[Kelli Suding, M.Ed.](#)

[Maggie Pickett, M.A., CCC-SLP](#)

[Michelle Soriano, M.A.](#)



What are inclusive technologies?

The What and Why of Inclusive Technology



Components of Access

Universal Design for Learning

Choice built into the environment

Accessible Educational Materials

Same content, **accessible** format

Accessible & Assistive Technology

Different way of accessing, interacting, responding to **same** content



Equitable Access

Materials

Information or content of the curriculum.

Assistive Technology (AT)

Hardware or software used by students with disabilities that is matched to their functional needs (e.g., physical, sensory, learning).



- **Technology**

Hardware or software that delivers the material to learners.

- Technology is accessible when **directly usable without AT** or **made usable with AT**.

What are inclusive technology systems?



A balanced and inclusive technology infrastructure that examines assistive technology (AT), educational technology (EdTech), and infrastructure technology (IT) as part of a technology ecosystem.

CITES at CAST

Creating Inclusive Technology Systems

Current Reality

Assistive Technology, Instructional Technology, Communities, Educators.
Separate values, data, and knowledge.
All helping children learn.



Our Goal

A supported system of collaboration with shared values, data, and knowledge.
Helping **all** children learn.





What barriers are you experiencing in reaching this goal...

- In the classroom?
- In your system?

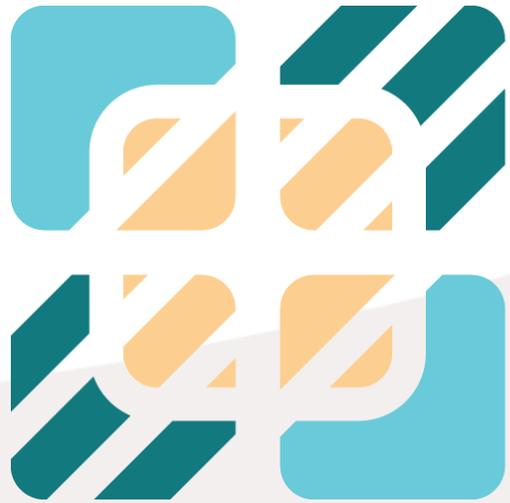
Current Reality



Our Goal



How can we build inclusive technology systems?



Center on Inclusive Technology & Education Systems

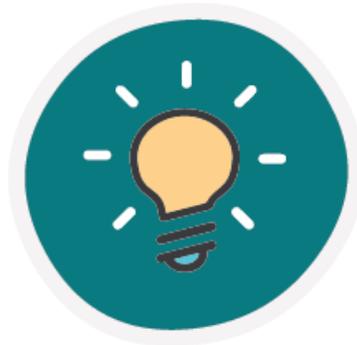
Framework Areas



Leadership



Infrastructure



Teaching



Learning



Assessment

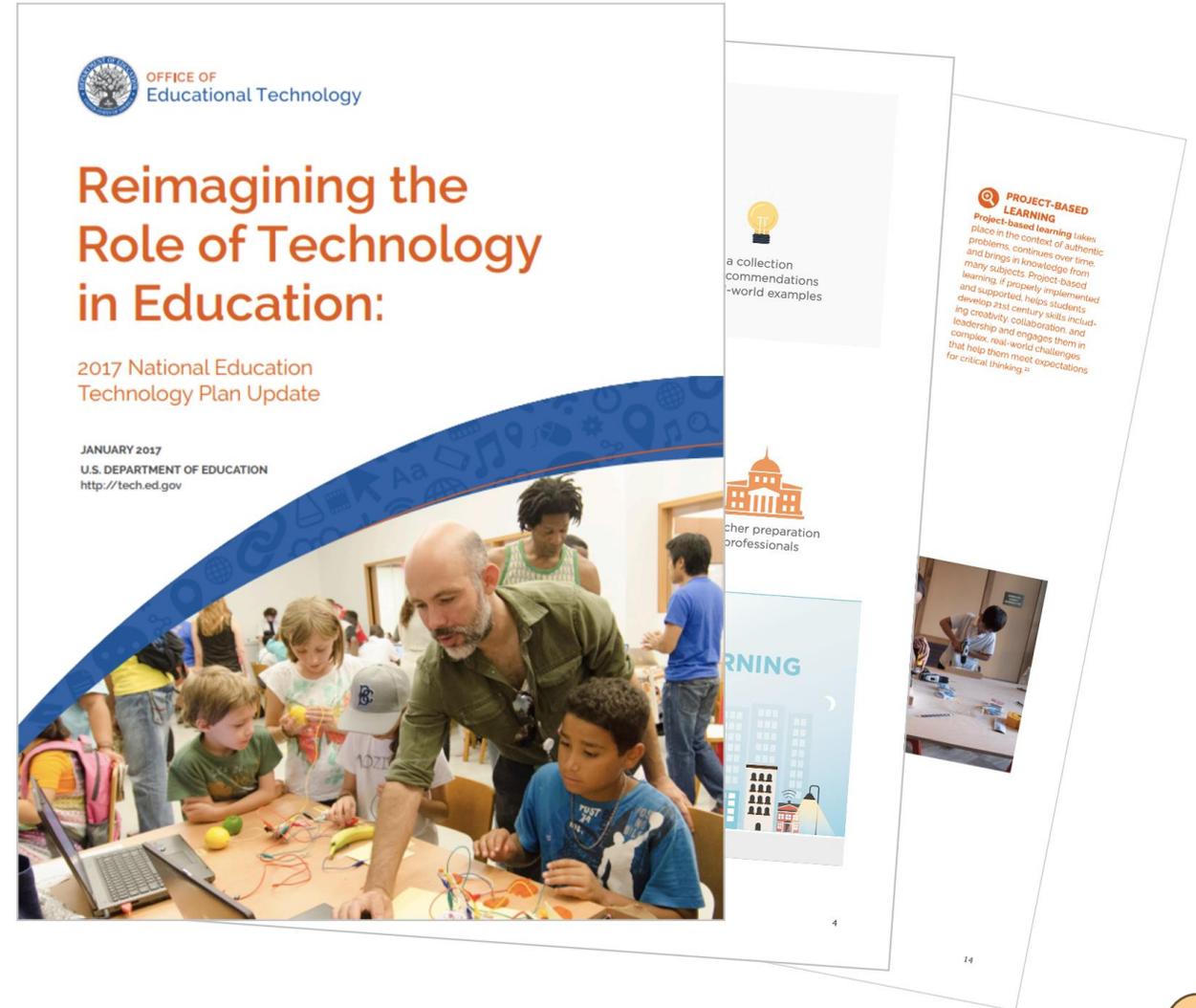
Family Engagement in Inclusive Technology Systems



Enhancing the NETP

National Education Technology Plan

- Digital Use Divide
- Digital Design Divide
- Digital Access Divide



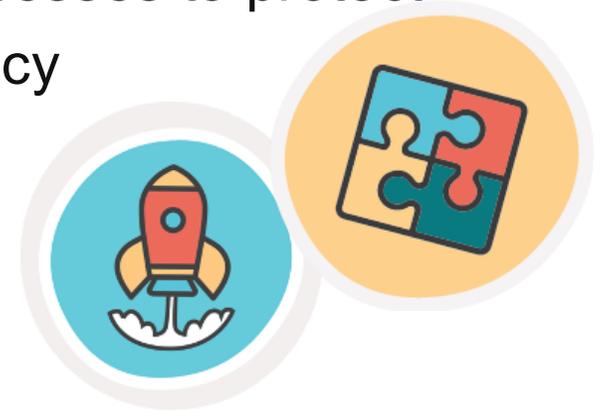
Digital Use Divide

- **What:** Inequitable implementation of instructional tasks supported by technology.
- **Causes:** Limited engagement, point-and-click assessments, locked-down devices, and penalties for organic collaboration.
- **Effects:** Lack of opportunities to use that technology in formal education beyond digitized versions of practices of classrooms



Digital Use Divide Recommendations

- Develop a “Portrait of a Learner”,
- Design and sustain systems to support the development of competencies,
- Implement feedback to empower students,
- Develop rubrics for digital resource and technology adoption to ensure that tools are accessible and aligned with UDL
- Review subject area curricula to support technology proficiencies
- Build relationships with orgs to support access for students
- Provide PD opportunities,
- Develop processes to protect student privacy



Digital Design Divide

- **What:** Inequitable access to time and support for professional learning to design learning experiences with edtech
- **Causes:** Lack of vision, culture, feedback, skills, evaluation, and collaboration among educators and stakeholders

- **Effects:** Inconsistent and ineffective use of edtech to support student learning and engagement



Digital Design Divide Recommendations

- Develop a “Portrait of an Educator”,
- Design and sustain systems for ongoing learning,
- Implement feedback mechanisms,
- Provide digital literacy training,
- Develop processes for evaluating edtech tools,
- Foster an inclusive technology ecosystem, and
- Support a systemic culture of trust and empowerment



Digital Access Divide

- **What:** Inequitable access to connectivity, devices, and digital content, including lack of accessibility
- **Causes:** Geographic barriers and local skill capacity, inaccessible

- **Effects:** Lack of access to education



Digital Access Divide Recommendations



- Develop a “Portrait of a Learning Environment”,
- Establish an edtech director to ensure the wise and effective spending of edtech funds.
- Conduct regular needs assessments
- Develop guidelines for device refresh policies
- Leverage state purchasing power
- Leverage public/private partnerships and community collaboration to bring broadband internet access
- Develop processes and structures that ensure the inclusion of accessibility
- Plan for and incorporate skills and expectations across all grade levels and subject areas for Digital Health, Safety, and Citizenship, and Media Literacy.

Framework Development Process

1. Knowledge Development
2. Framework Development
3. Evidence Review
4. *Never Finished*

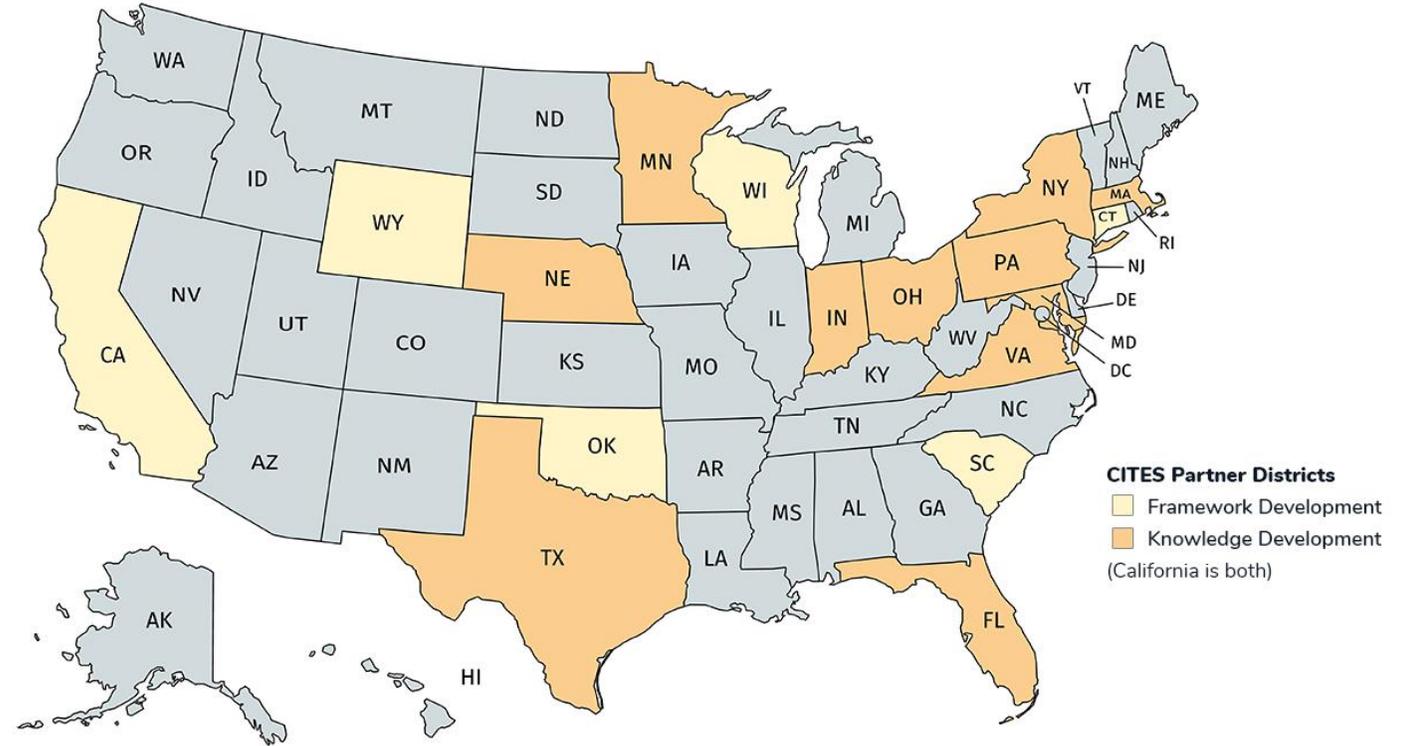
Learn more at

bit.ly/FrameworkDevelopment



Framework Development Districts

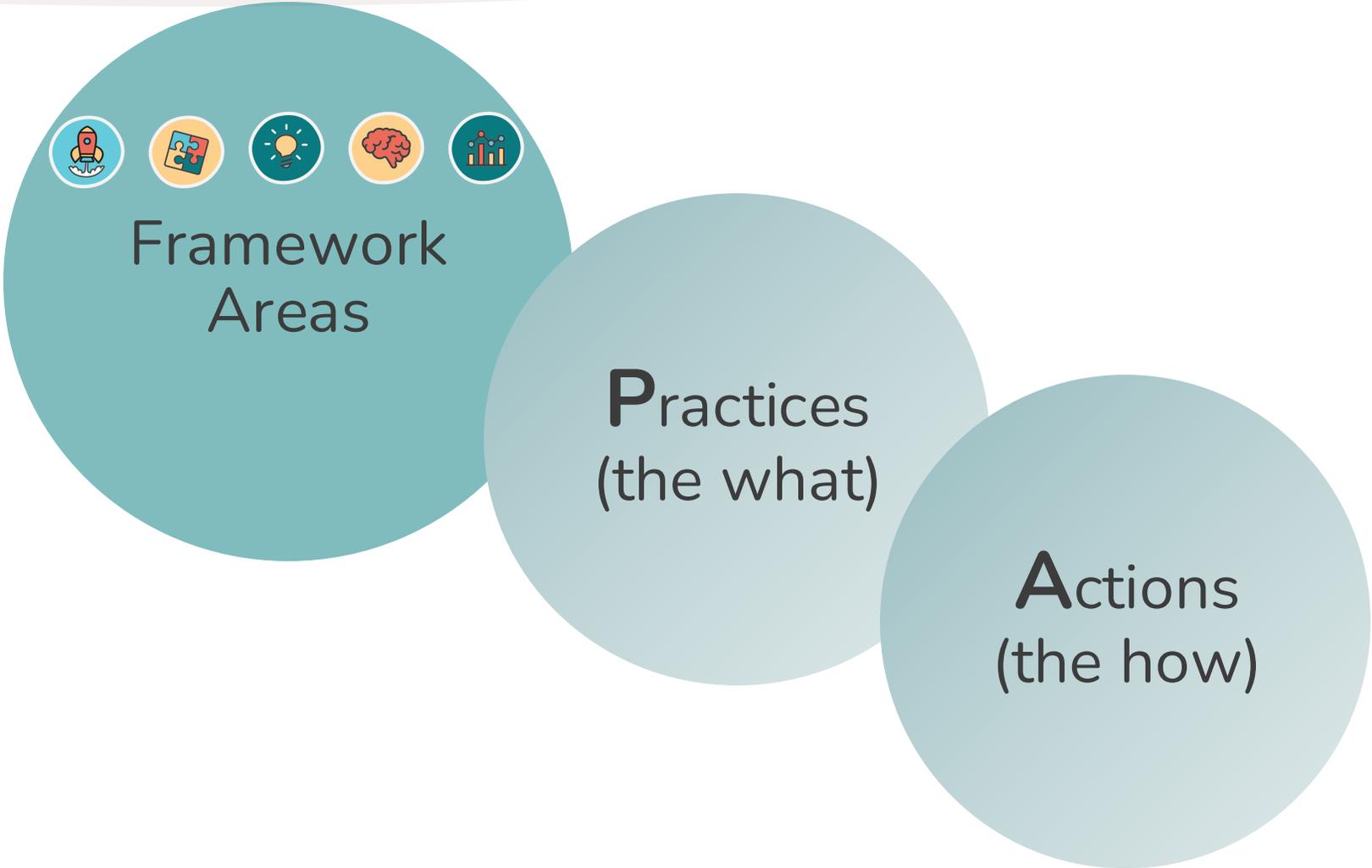
- Florence One Schools
- Grossmont Union High School District
- Hayward Community School District
- Jenks Public Schools
- Laramie County School District
- Placer County Office of Education
- Wethersfield Public Schools



The What and the How



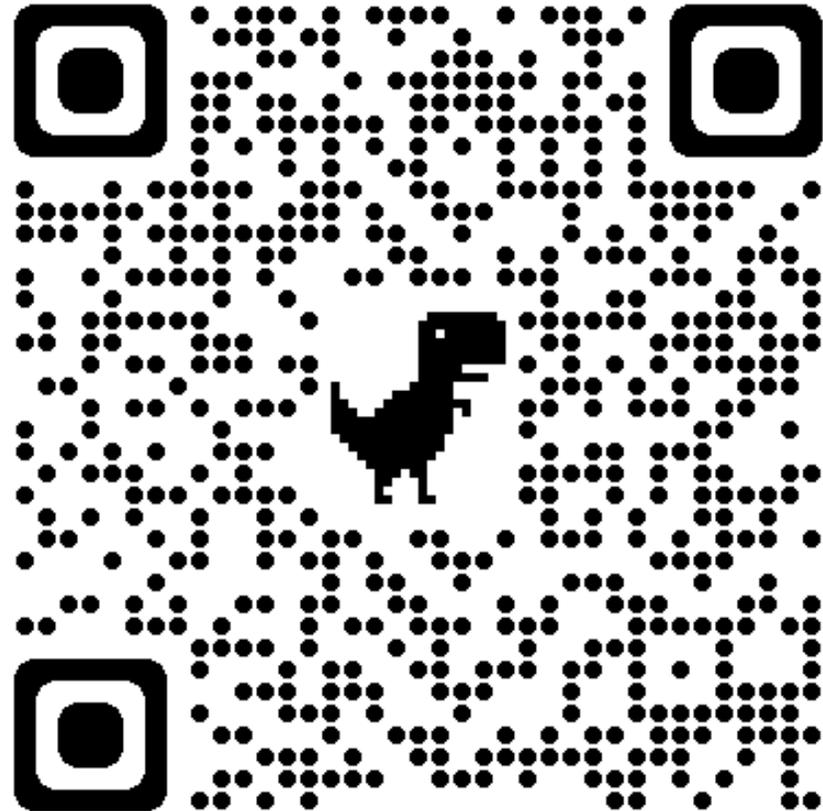
Components of the CITES Framework



Explore and Engage with the CITES Framework

1. High level overview of the framework areas and practices
2. Choose your own adventure...

cites.cast.org



Framework Area: Leadership



- Provides collaborative practices to build into the decision-making process
 - Create vision & goals
 - Develop a strategic plan
 - Measure progress
 - Develop a professional learning system
 - Engage families in leadership

Leadership

Create Vision & Goals

P

- Collaboratively develop a community-wide vision for an inclusive technology ecosystem

A

- Involve relevant parties
- Incorporate inclusive technology support in the vision
- Gather input routinely
- Communicate- Share widely

Develop a Strategic Plan

P

- Develop a technology plan that supports the vision

A

- Technology plan and budget reflects shared ownership
- Specify leadership roles for AT, EdT, and IT divisions
- Establish goals and benchmarks
- Share plan widely

Leadership Continued

Measure Progress for Continuous Improvement (CI)

P

- Use multiple data sources as part of the CI process to analyze progress towards goals

A

- Develop a data plan aligned with technology goals
- Use data analysis for continuous progress
- Keep stakeholders informed consistently

Develop a Professional Learning System (PLS)

P

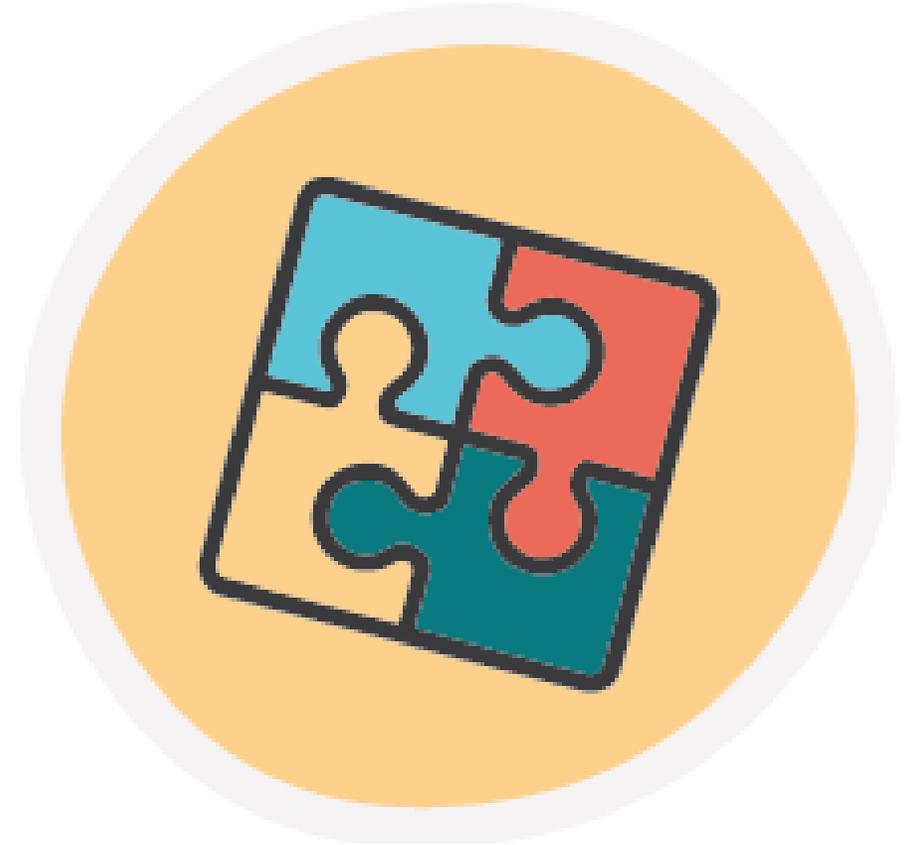
- Establish a robust PLS with clear outcomes including training and coaching for teaching with inclusive technology.

A

- Prioritize PL design and delivery to promote the vision
- Establish coaching capacity that will promote and implement the vision

Framework Area: Infrastructure

Requires attention to the hardware, software, and connectivity that are used to ensure the technology is usable by the broadest range of learners



Infrastructure

Personalize Learning Devices

P

- Provide supported, individualized technology options when necessary
- Select built-in accessibility features

A

- Include students and families
- Ensure knowledge of the process
- Provide individual technology options

Unify Inclusive Technology Decision-Making

P

- Ensure a continuum of technology services through the purchasing, deployment, management, and procurement of technology hardware and software to verify interoperability with AT

A

- Collaborate to choose, manage, and deploy
- Ensure alignment
- Include individuals with disabilities

Infrastructure Continued

Integrate Accessible Educational Technology Systems

P

- Ensure all learners have access to accessible, high-quality educational materials & technology

A

- Require accessible purchases
- Integrate accessibility features
- Choose accessible materials

Ensure Student Privacy & Secure Inclusive Practices

P

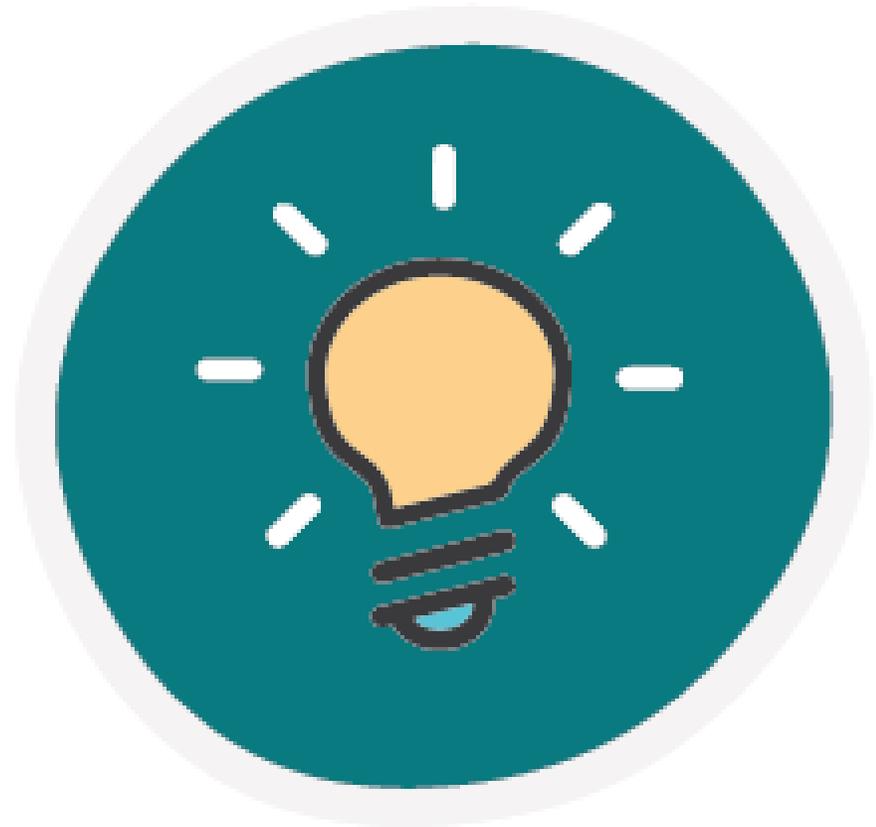
- Ensure all learners' data and personal information are secure

A

- Uphold best practices
- Support and train staff
- Proactive implementation
- Inform families
- Modernize data

Framework: Teaching

Setting expectations for educators to create learner-centered experiences using technology, including accessible educational materials (AEM) and assistive technologies (AT), **they meet the needs of all students.**



Teaching

Develop Technology Competencies

P

- Establish technology competencies for educators as part of evaluation.
- Provide opportunities to work toward competencies:

A

- Provide training on accessible educational materials:
- Provide training on assistive technology

Design Learner-Centered Experiences

P

- Provide opportunities for educators to learn how to proactively design and deliver learner-centered experiences using technology.

A

- Provide opportunities to collaborate
- Provide opportunities to use AT include the use of AT for students with disabilities in the design and delivery of learning experiences

Teaching Continued

Enhance Technology Skills

P

- Provide job-embedded growth opportunities (i.e. coaching, mentoring, critical friend partnerships)

A

- Provide networking opportunities to enhance inclusive technology knowledge and skills for designing and delivering accessible, learner-centered experiences.

Engage Families in Teaching Practices

P

- Provide guidance for communicating with families engaging in regular communication

A

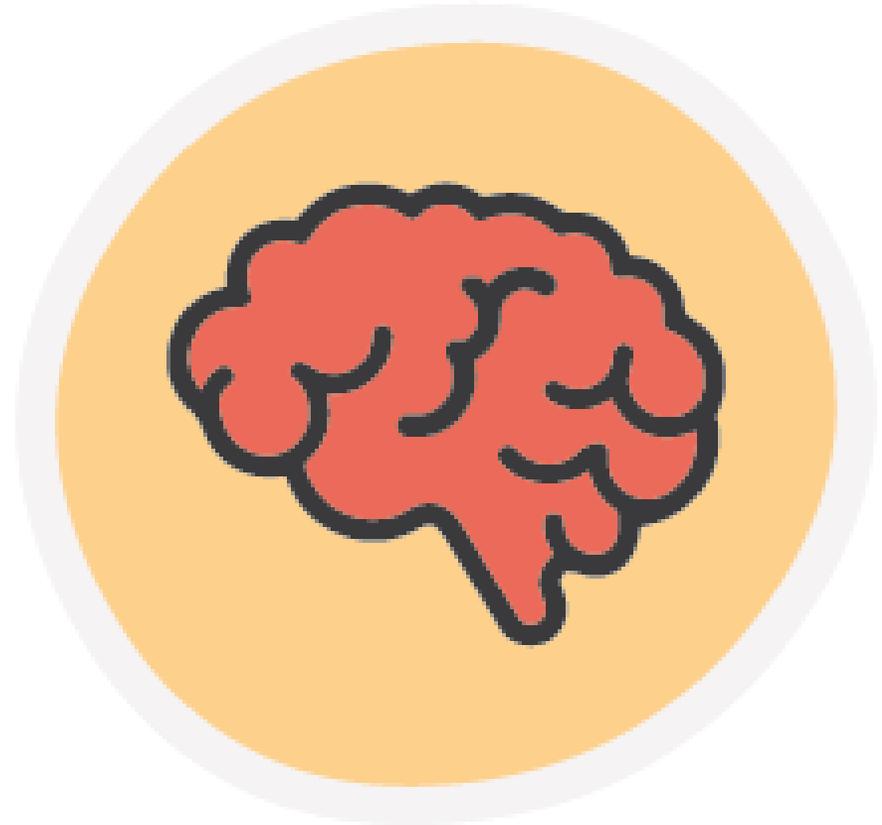
- Encourages educators to include families in a collaborative planning process to help inform educational accommodations and supports for their child's education

Framework: Learning

- Established district expectations that all learners use technology to develop agency and autonomy supports the development of self-determined, young adults with the agency and autonomy to engage in the workforce and postsecondary education.

"acquire the **same** information, engage in the **same** interactions, and enjoy the **same** services as learners without disabilities,

- in a way that is equally effective, equally integrated, and with substantially equivalent ease of use" [OCR](#)



Learning

Learners Actively Engage

P

- Encourage technology use for learning goals to encourage learners to use technology to progress toward learning goals.

A

- Encourage expressive technology use to support learners to use technology to express themselves

Learners Make Independent Choices

P

- Support understanding their technology options and can make independent choices about which options are most useful in different situations students are empowered to embrace the learning process.

A

- Provides learners the opportunity to learn how to generalize technology skills across various settings.

Learning Continued

Empower Families to Support Student Learning

P

- Involve families in the learning process and to provide resources to help children and youth continue to learn outside of school.

A

- Provide families with supplemental resources to take part in learning at home including options for accommodations.



Framework Area: Assessment



A comprehensive and balanced assessment system combines multiple assessment approaches to make sure that children and youth with disabilities, families, educators, and administrators have sufficient information to make instructional and programmatic decisions.

Assessment

Leverage Accessible Standardized Assessments

P

- Procure and administer standardized assessments that are inclusive and accessible so all can demonstrate what they know

A

- Procurement policies include accessibility standards and requirements
- Align learning accommodations to testing accommodations, including AT
- Provide relevant training on available and universal supports and allowable accommodations for assessments

Design Accessible Formative Assessments

P

- Select and design accessible formative assessments and provide appropriate accommodations

A

- Ensure educators have access to formative tools that are accessible
- Train educators on how to create accessible formative assessments

Assessment Continued

Collaborate with Testing Officials

P

- Collaborate with local and state testing coordinators to ensure Sped and AT professionals are included in decision-making process

A

- Ensure Sped and AT personnel have leadership roles related to assessment
- Advocate for accessibility in state-required assessments

Analyze Assessment Data for Decision-Making

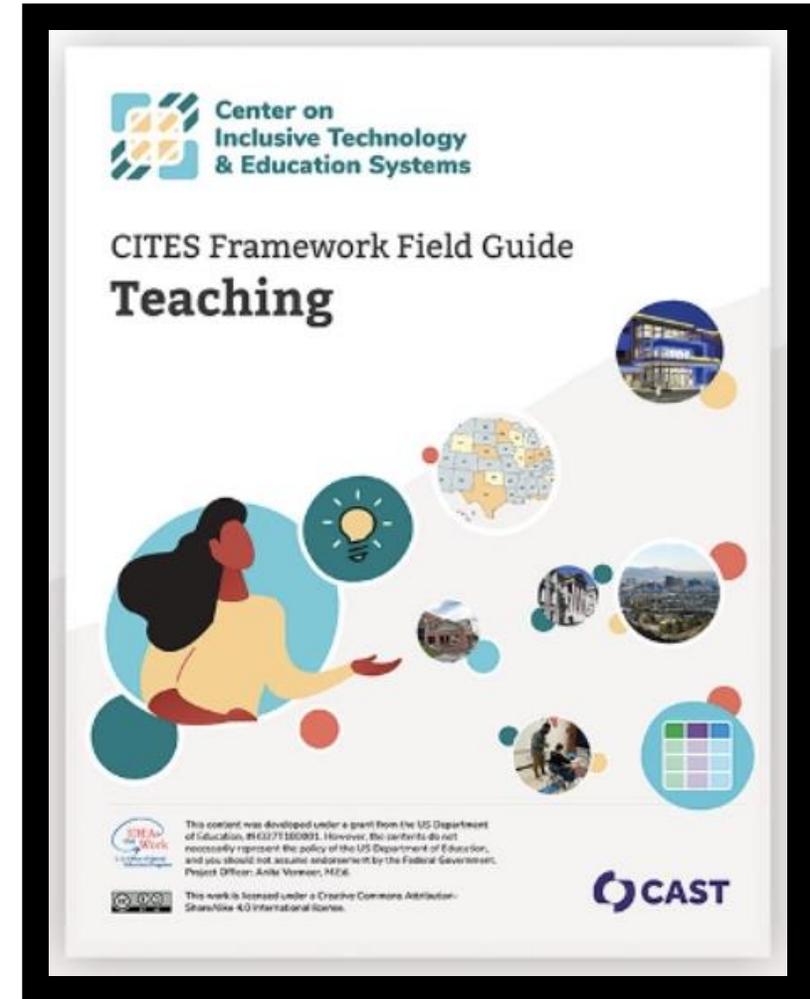
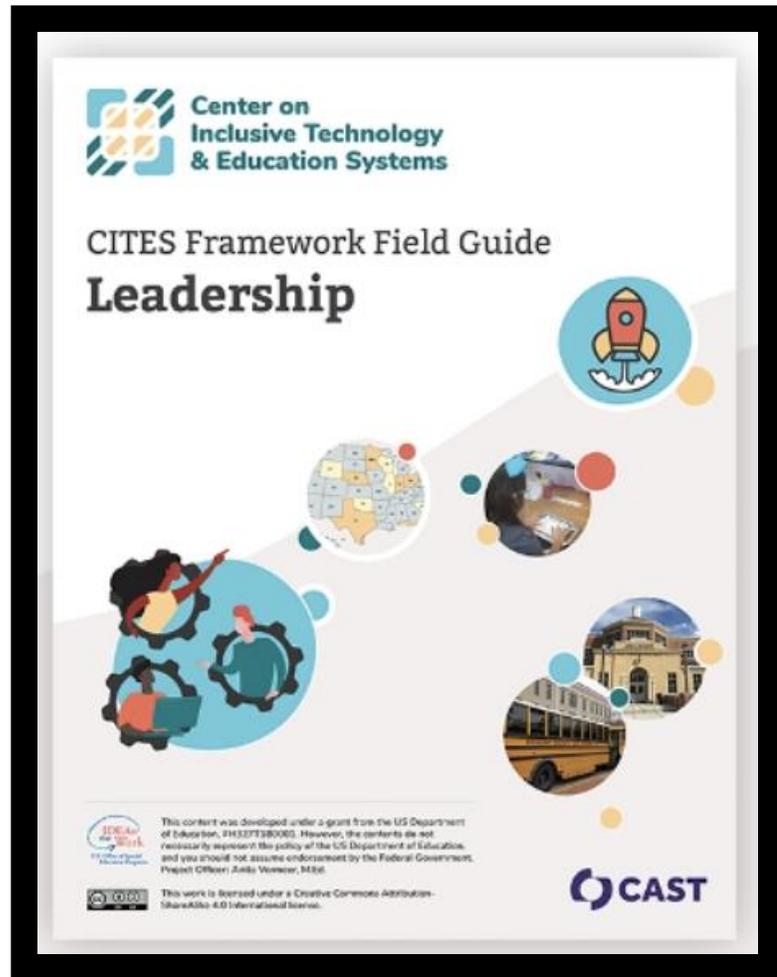
P

- Analyze assessment data to drive instructional, programmatic, and systematic decisions

A

- Use assessment data
 - To drive instructional decision
 - In programmatic decisions
 - To inform systemic decisions

Leadership & Teaching Guide



Leadership & Teaching Self Assessments

CITES
**Self-Assessment Tool
for District Leaders**



 **Center on
Inclusive Technology
& Education Systems**
cites.cast.org



 This content was developed under a grant from the US Department of Education, #H327T180001. However, the contents do not necessarily represent the policy of the US Department of Education, and you should not assume endorsement by the Federal Government. Project Officer: Anita Vermeer, M.Ed.

 This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International license.

CITES
**Self-Assessment Tool
for District Leaders:
Teaching Practices**



 **Center on
Inclusive Technology
& Education Systems**
cites.cast.org



 This content was developed under a grant from the US Department of Education, #H327T180001. However, the contents do not necessarily represent the policy of the US Department of Education, and you should not assume endorsement by the Federal Government. Project Officer: Anita Vermeer, M.Ed.

 This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International license.



Putting it all together.



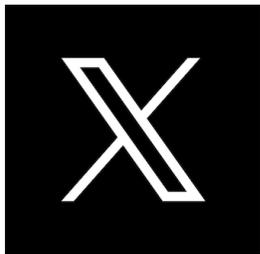
Slinging Spaghetti



CITES Community of Practice

Join the conversation:

- Quarterly open **community meetings** via zoom
- **Slack channel** discussions
- **Social media** networking



Would you like to invite others to the CITES Community of Practice?

Please do! Here is an invitation link to share.

cites.cast.org/more/community-of-practice

More from CAST...



The **Accessible Learning Experience**



Tips for Creating AEM

bit.ly/CAST-AEM-Tips

CAST | Until learning has no limits®

Tips for Accessible Educational Materials

- 1. Don't assume digital means accessible.**

We used to think that if an educational material was digital it was automatically accessible. **We now know** that digital content is not inherently accessible so we provide learners with customizable digital content – content they can personalize. **And we are noticing** that many learners (not just those with disabilities) are more engaged, have improved fluency and skills, and better comprehension when using content they can make their own.

Learn How

 - [Personalize the Reading Experience](#)
 - [Personalize the Writing Experience](#)
 - [Teaching with Accessible Math](#)
 - [Teaching with Accessible Video](#)
- 2. Add "alt text" to images.**

We used to think text was the only barrier in our curricular materials. **We now know** that images can create a barrier for learners who use screen readers, if an alternative means for perceiving the information in an image is not provided. **And we are noticing** that adding alternative ("alt") text (e.g., "photograph of a moose crossing a road") reduces this barrier and can help all learners better understand the relationships represented in the images.

Learn How

[Adding Alternative Text to Images](#)
- 3. Add closed captions to videos.**

We used to think all learners could learn from videos. **We now know** that audio without accompanying text is a barrier for learners who are deaf, hard of hearing, or bilingual learners so we provide captions. **And we are noticing** that adding captions helps all learners better understand the relationships represented in the videos.

Learn How

[Creating Accessible Video](#)

Multimedia Resources

Podcast:

The Learning Experience

- Available on all major podcast platforms as well as on CAST's accessible player with interactive transcript

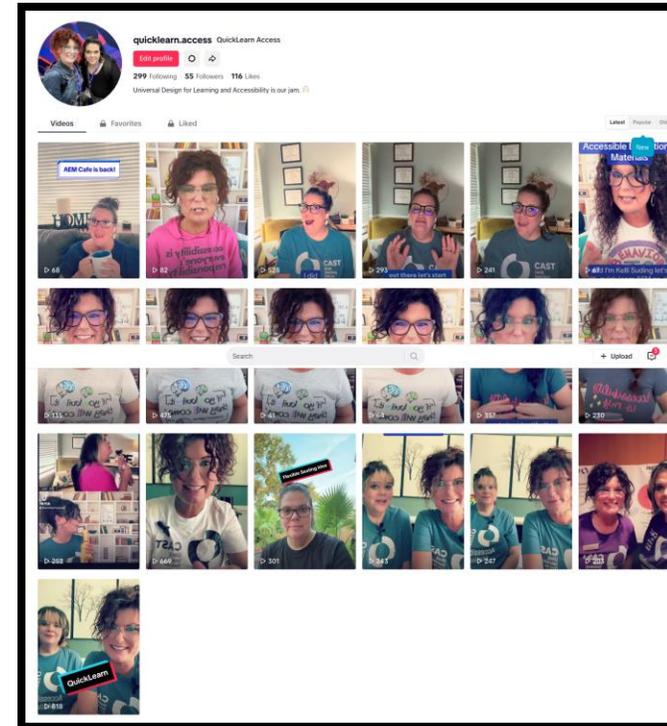


bit.ly/accessible-learning-podcast

Quick Learns

Bite-sized videos (1-2.5 minutes)

- [TikTok](#)
- [Instagram](#)
- LinkedIn: [Kelli](#) & [Michelle](#)
- X: [Kelli](#) & [Michelle](#)
- [Facebook](#)
- Bluesky: [Kelli](#) & [Michelle](#)
- [YouTube](#)



Let us know how we did

Please provide
feedback via our short
evaluation form or email us
at accessibility@cast.org.

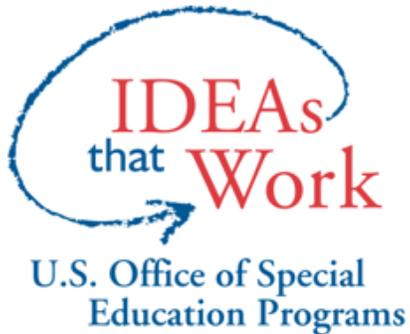


bit.ly/CAST-eval

Thank you! Stay connected.

- 🌐 Website: cites.cast.org
- Professional Learning: castpl.org
- 📖 Books & Media: publishing.cast.org
- Email: cites@cast.org
- 📞 Phone: (781) 245-2212
- 📍 50 Salem St., Building B, Ste 303
Lynnfield, MA 01940-0030

Disclaimer



This content was developed under a grant from the US Department of Education, #H327T180001. However, the contents do not necessarily represent the policy of the US Department of Education, and you should not assume endorsement by the Federal Government. Project Officer: Anita Vermeer, M.Ed.



Resource created by [The Center on Inclusive Technology & Education Systems](#) at [CAST](#) and licensed under a [Creative Commons Attribution 4.0 International License](#).