CIDDL Research and Practice Brief 4: Creating System-Wide Change for the Provision of Accessible Educational Materials

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OUR COLLECTIVE WHY 99

Dear stakeholder,

Thank you for engaging with the Center for Innovation, Design, and Digital Learning (CIDDL). The work that you are about to access is supported with funding from the Office of Special Education Programs at the U.S. Department of Education.

The CIDDL Center is striving to impact the use of educational technologies into preparation programs, including special education, early intervention, and related services personnel preparation and leadership personnel preparation programs that prepare professionals serving students with disabilities.

CIDDL Research and Practice Briefs

CIDDL Research and Practice Briefs is a series of reports on research and practices regarding the innovative use of technology in special education, early childhood, related services personnel preparation and leadership personnel preparation programs as well as K-12 educational settings. For each brief, an expert or practitioner in the field is invited to discuss their research and practices. In addition, experts and practitioners will share their insights into opportunities and challenges about applying their research and practices to professional preparation programs.

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Guest Expert: Cynthia Curry

[Cynthia Curry](#) is the Director of Technical Assistance and Program Director at the National Center on Accessible Educational Materials at [CAST](#). Her work focuses on the incorporation of inclusive technologies in education and career training, including the development of quality indicators and standards for the selection of technologies. Cynthia's work also encompasses guidance around how policy at all levels of the education system, from federal to state to school levels, can shape the use and acquisition of accessible educational materials.

Topic: Creating System-Wide Change for the Provision of Accessible Educational Materials

What will you learn from this Brief?

In this brief, Cynthia Curry discusses the meaning behind accessibility and how it can be the gateway into the Universal Design for Learning (UDL) framework. Cynthia explains the difference between accessibility and availability as well as offers guidance on what elements to look for when determining if an educational material is accessible. Finally, she discusses resources to help support a system's level approach to the provision and distribution of accessible educational materials, including areas for future research.

Context

The Department of Education's Office of Civil Rights defines accessibility to mean "a person with a disability is afforded the opportunity to acquire the same

information, engage in the same interactions, and enjoy the same services as a person without a disability in an equally effective and equally integrated manner, with substantially equivalent ease of use. The person with a disability must be able to obtain the information as fully, equally and independently as a person without a disability" (Office for Civil Rights, 2013).

The National Center on Accessible Educational Materials for Learning (the AEM Center) suggests the POUR principles to help educators ensure that all materials are accessible to everyone. The principles define four qualities of an accessible experience:

- Perceivable: Provide options for learners to adjust the presentation of information to suit their individual needs and preferences, including with the use of image descriptions, closed captioning, and color contrast.
- Operable: Provide options for how learners can navigate and interact with content through a variety of means, such as by mouse, keyboard, or voice commands. It is important to include structured table of contents, headings, and descriptive links as well as provide adequate time for learners to explore the materials.
- Understandable: Ensure that content is presented in a consistent and intuitive manner. This means using appropriate language for the level of the audience, defining new or unfamiliar vocabulary, and providing clear instructions.
- Robust: Ensure that content will work for learners on a wide variety of current and future technologies and platforms. This means reviewing materials with accessibility checkers, including metadata, and finding users to test materials for accessibility.

According to Curry et al. (2018), many educators and their institutions learn about the definition of accessibility only as a result of litigation. A survey conducted by Bausch and Ault (2012) found that teachers exited special education preparation programs without the adequate training in the use of assistive technologies (AT). This is despite federal legislation requiring the provision of AT and related services for students with disabilities. The Individuals with Disabilities Education Act (IDEA, 2004) requires that each Individualized Education Program (IEP) team must consider whether a child needs AT devices or services and that AT devices and

services must be documented in a child's IEP as a part of special education, related services, and/or supplementary aids or services.

To help guide K-12 and higher education agencies ensure that educational materials are usable and available in a timely manner for students with disabilities, the AEM Center has produced a set of quality indicators (Curry & Pérez, N.D.). These quality indicators help with planning, implementing, and evaluating a coordinated system for the provision of accessible educational materials and technologies. The [quality indicators](#) can be found on the AEM Center's website and include the following:

1. Coordinated system: The agency has a method in place such that students who need accessible materials or technologies can receive them.
2. Timely manner: Learners who need accessible materials and technologies receive them at the same time as non-disabled peers receive their materials.
3. Written guidelines: The agency has guidelines that include the roles, knowledge, skills, and coordination required to deliver accessible materials and technologies.
4. Comprehensive learning opportunities: The agency provides ongoing learning opportunities for stakeholders at all levels around the selection and acquisition of accessible materials and technologies.
5. Data collection: The agency has a system in place to monitor the provision and distribution of accessible materials and technologies, as well as data around their effective use for providing learners with disabilities access.
6. Data use: Data is used to guide system wide changes to improve all aspects of the provision and use of accessible materials and technologies.
7. Allocation of resources: The agency ensures that sufficient resources are available for the delivery and sustainability of quality services – including accessible materials and technologies – for learners who need them.

Educational settings can vary widely from public to private, elementary, high school, and higher education. The quality indicators were designed to help stakeholders meet the needs of their students within these diverse contexts. The indicators also promote multiple pathways for reaching the goal of a coordinated system, reflecting a Universal Design for Learning (UDL) approach (Curry & Pérez, N.D.). In this brief, Cynthia Curry discusses how accessibility is imbedded within the

UDL framework. She highlights how the POUR principals can help guide curriculum design and how a system's level approach to the acquisition and distribution of accessible educational materials and technologies requires support at multiple levels.

Key Insights

The UDL framework (Meyer et al., 2014) is framed around three principles that encourage educators to consider ways to present information in a variety of modalities (multiple means of representation), offer students flexible pathways to reach their learning goals by building on their strengths and interests (multiple means of engagement), and help students demonstrate their learning in a variety of ways (multiple means of action & expression). The first step, however, is ensuring that all students can use those materials. Whether that means ensuring that English language learners have materials in a different language, or that individuals with disabilities are provided assistive technologies and accessible formats.

> Cynthia Curry: "Really, the entry into a UDL framework is to make sure that everybody can engage with those materials."

> Cynthia Curry: "Accessibility should be embedded within a UDL framework. It's essential for individuals with disabilities, but we know that the same practices benefit all learners."

Implementing and sustaining a coordinated system around services related to the procurement and provision of accessible educational materials requires time and effort (Curry & Pérez, N.D.). However, this investment of time and money pays off in the long run as accessible materials and technologies benefit all learners, not only students with disabilities.

> Cynthia Curry: "During the pandemic and the school building closures in the spring of 2020, there was a lot of talk about accessibility. The more appropriate term for that would be availability: making sure that students who are learning

remotely have available to them broadband, that they have available to them their textbooks, access to the learning management system or the portal that their teachers were using to provide curriculum during remote learning."

According to Curry et al. (2018), education stakeholders need to know the "what," "why," "who," and "how" around accessible materials and technologies: what accessibility means, why it's important, who requires it, and how educational agencies meet their responsibilities. General and special education preparation must be done in a way such that this information and related skills are intentionally distributed across both, not falling upon the special education pathway alone. A system's levels change won't take place until everyone understands their role.

> Cynthia Curry: "We're not going to get to a system's level approach to addressing accessibility in a way that is robust, consistent, high quality, without everybody across the system really understanding their roles and responsibilities."

According to Cynthia, Training around accessibility and assistive technology works. When preservice educators have been well-prepared in their teacher education programs, it has an impact on their practice in the field. But research is still lacking around how technology can be effectively infused into these programs.

> Cynthia Curry: "We think that there's an individual responsibility Around AEM, but really most impactful is going to be the systems change, how can systems work together to coordinate around making sure that, from the source to the student, Accessibility is a consideration."

Resources

The AEM Center offers a wide variety of resources to support stakeholders at every level to better integrate accessible educational materials into their home, class or district. Cynthia suggested the following resources in her discussion:

- [The Online Learning Series on accessible materials and technologies](#) is intended for individuals or teams to learn best practices for creating,

providing, and selecting accessible materials and technologies. The series consists in five modules, each lasting between 2-4 hours.

- The AEM Pilot is an interactive tool intended to guide states or districts to create more inclusive learning environments for students with disabilities. The tool includes self-assessments and progress monitoring tools.

Link to Video

This Research and Practice Brief can be viewed on video online at https://tinyurl.com/497snrn6

Suggested Readings

Bausch, M. E., & Ault, M. J. (2012). Status of Assistive Technology Instruction in University Personnel Preparation Programs. Assistive Technology Outcomes and Benefits, 8(1), 1-14.

Curry, C., Carl, D., & Pérez, L. (2018). Procuring Accessible Digital Materials and Technologies for Teaching and Learning: The What, Why, Who, and How. National Center on Accessible Educational Materials.

Curry, C., & Pérez, L. Do You Think Accessibility When You Select Digital Materials and Technologies? Quality Indicators Are Here for You.

Individuals with Disabilities Education Improvement Act, 20 U.S.C. §§ 1400 et seq. (2004)

Meyer, A., Rose, D. H., & Gordon, D. T. (2014). *Universal design for learning: Theory and practice.* CAST Professional Publishing.

Office for Civil Rights. (2013, February 28) OCR Compliance Review No. 11-11-6002. *U.S. Department of Education.* https://www2.ed.gov/about/offices/list/ocr/docs/investigations/11116002-b.html#skipnav2

Transcription of Interview

Transcription of the interview can be found at https://ciddl.org/brief4-interview-transcript/

For More Information

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