Supporting Student-Centered Learning Through Inclusive Technology and Universal Design for Learning

**Brazosport Independent School District** (Clute, Texas)

**Challenge Question:** How can districts use instructional coaches to create personalized learning experiences for all students by integrating accessible technology tools and Universal Design for Learning?

Brazosport Independent School District (ISD) in Clute, Texas, launched a 1:1 technology initiative in 2014. Starting with a small number of pilot schools, district leaders closely examined educational technology (EdTech) and assistive technology (AT) needs as they developed a technology plan that would support the needs of all students. The district is now integrating the plan throughout all schools in the district, replicating the successes of pilot schools, and using digital learning coaches in each building to support effective technology integration. The district vision for this integration includes ensuring equal access for students with disabilities to content and resources and leverages technology as a means to that end. The district leaders emphasize,

> “Technology helps us accomplish improved learning. Learning is the goal, and technology is the means to an end. It [technology] enables access to the learning.”

— Brazosport ISD leadership

**District Facts**

- Approximately 13,000 students are enrolled in Brazosport ISD.
- 9% of students receive special education services.
- 13% of students are English learners.
- 62% of students are economically disadvantaged.

**Setting the Stage**

Brazosport ISD transitioned to a 1:1 device district in the 2014–15 academic year. Through a coordinated 3-to-5-year plan to support technology integration, the district created digital coach positions; the individuals in these positions now serve as campus instructional coaches. This coordinated plan included cross-department collaboration between information technology, curriculum, instruction, assessment, special services, and teaching and learning to ensure access for all learners across the district. The district began implementation with a small group of pilot schools at the middle school level and an examination of both EdTech and AT needs. Secondary schools were added in the second year of implementation, with elementary schools added thereafter.
During this process, Brazosport ISD focused on developing a comprehensive district- and campus-level professional learning plan, including annual digital learning conferences and job-embedded, real-time coaching support for teachers. During the initial phases of the rollout, these coaches were digital learning coaches—their role was laser focused on the implementation of technology tools for teaching and learning and providing technology training to build teacher skill with the tools. As time went on, the role of these coaches transitioned to instructional coaches who supported teachers in the systematic integration of technology into instructional practices (teaching, learning, and assessment). Instructional coaches support teachers through professional learning communities, modeling and coteaching lessons and strategies, and providing guidance on the use of student data to drive instructional decision making.

How Instructional Practices Laid the Foundation for Success

Supporting Student-Centered Learning Through Accessible Technology

Brazosport ISD has prioritized the role of the instructional coach as the bridge in designing a more inclusive technology ecosystem within the district. Coaches are cross trained through a collaboration between the departments of curriculum and instruction and special services to ensure that all coaches have the skills to support teachers in using accessible technology features and AT to meet the needs of all students. The two departments have worked collaboratively to develop curriculum frameworks with embedded teaching and planning resources; digital tools; strategies for differentiation; and assessment options, including a resource called “G’s Cheat Sheets.” These sheets provide all teachers with links to digital and AT resources to support learners aligned to their cognitive areas of strength and weakness.

The district holds regular cross-departmental meetings—language acquisition, special education, digital learning, instructional coaching, curriculum and instruction—to share what is happening across the district and to facilitate targeted discussions about areas of focus. This collaborative approach extends to the work of the coaches. Coaching includes every staff member who interacts with students—general education teachers, special education teachers, aides, and paraprofessionals—to ensure that all staff feel comfortable with the tools and resources available to them. The district credits its collaborative approach for the widespread adoption of accessible instructional materials available through the Texas Education Agency, as well as the use of a range of digital tools with built-in accessibility features. District leaders note that teachers have come to view access to these tools as integral to their teaching practices. District special education leaders shared that, by working closely together and making accessibility a priority for all staff, they were better able to support students with disabilities, rather than needing to modify and accommodate lessons after the fact. One of the district leaders commented, “The departmental meetings help us in being a part of ‘baking
the cake’ and then we are putting the ‘icing’ on the cake for our students with disabilities. We know that consideration of accessibility is already built into the thinking and planning of the teacher, and we don’t have to bake another cake for students with disabilities.”

**Accessible Technology Tools to Support Active Engagement and Flexible Learning Strategies**

The widespread adoption of inclusive technology tools in the classroom has helped Brazosport ISD see improvements for students with disabilities because barriers to accessing the curriculum have decreased. This shift has freed up AT specialists to spend more time working directly with students and their families to address needs for specific AT supports.

Brazosport ISD’s vision for learning includes a focus on the following **principles aligned with UDL**, with a goal of building, engaging, and creating with technology tools:

- **Engagement**—blended learning models that include playlists, student choice, impact cycles, data trackers to keep active notes, and learning journals for student self-monitoring of learning

- **Representation**—providing multiple means and methods to access information, including tools for customization of information to support all learners, for example, translators; speech to text; text to speech; eye gaze; and, most recently, virtual compared to in-person accommodation guides

- **Action or expression**—providing students with a variety of output options, including audio responses, typed versus written responses, speech to text, and G’s Cheat Sheets to assist with options to meet students’ individualized education needs

Shifting pedagogy to support this type of learning can feel uncomfortable for many teachers, especially when integrating new technologies into teaching practices. Brazosport ISD addressed teacher apprehension about new technology tools through teacher–student collaborations in learning how to use the tools. Those teacher–student cohorts then trained other students and teachers in a train-the-trainer model. In addition to building capacity of both students and teachers with the new tools, this approach helped demonstrate a model of more collaborative teaching and learning. Brazosport ISD students, as members of the district technology committee, are also involved in the decision-making process related to new technology—students have a voice, and instructional coaches regularly solicit student feedback on use to help inform future instructional technology decisions.
The involvement of students in technology decision making reflects the broader district goal for a customized and personalized learning experience for all students, supported by seamless technology integration. District leaders shared that they were driven by the notion of using technology to open doors for all students. One interviewee stated, “We want seamless integration of technology. If I am in a wheelchair when I approach a door, it should automatically open. We want something that is seamless like that in learning and instruction. The point of technology for learning is a seamless increase of accessibility to learning . . . the world has opened up . . . we shouldn’t even notice that the technology is there, it’s just part of the learning experience.”

**Digital Assessment Practice: Designing Inclusive and Accessible Digital Assessments**

Moving to a more inclusive technology model and ensuring 1:1 device access played a positive role in Brazosport ISD’s approach to conducting formative and summative assessments. The district used a variety of online assessment tools for summative assessment, and increased device access allowed for better alignment with formative assessments as well. The district noted that this shift increased the routine, independent, and effective use of digital accommodations for learners with disabilities throughout the learning cycle, not just for summative assessments. Additionally, the embedded digital accommodations align to Texas’s accessibility framework for standardized assessments. Ongoing collaboration between departments of curriculum and instruction, assessment, teaching and learning, and special services has resulted in the identification of digital tools with built-in accessibility features that can be used across instructional and assessment platforms, which ensures that all learners receive the support necessary to be successful in every learning setting, including assessments.