Designing Student Access for Equitable Learning

Equitable student access has become a topic that is synonymous with equitable learning. To meet the needs of all learners, access to devices and the internet must be supported by learning models that provide the best opportunity for all students to learn and feel empowered. This document provides a checklist for the essential topics and actions that every district/school community should be discussing, whether implementing a new access model or evaluating whether their current implementation advances the district's vision for learning and meets the needs of all learners.

ESTABLISH A SHARED VISION FOR LEARNING WITH COMMUNITY STAKEHOLDERS

It takes an entire community working toward the same goal to make any initiative successful. Everyone who has a stake in learner outcomes should be included in developing more flexible approaches and structures. Involve administrators, teachers, curriculum planners, IT staff, special education teachers, students, parents and community business leaders from the beginning of the discussion.

Create a shared vision of learning to help everyone understand what is possible for students. A critical output is a vision definition, with clearly defined learning objectives and measurements. Strong leadership, thoughtful facilitation and stakeholder involvement are essential to meet all needs, to build support and to develop a shared sense of urgency for change.

CONSIDERATIONS:

- Visioning Day: A good place to start is to host a district-wide "Visioning Day" to create a sense of urgency and common dialogue around what learning should look like to align with the needs of today's students and what your district needs to do to be successful. The first question to ask is, "Why are we providing access?", or "How has the access we've provided had an impact on student learning?" This process of self-reflection is a great way to discover your district's unique needs and how to overcome any challenges. For a visioning day to be successful, everyone involved in education must actively participate. A district should actively recruit from those whose voices are not always present.
- Community Forums: Another useful strategy to draw stakeholders into the vision defining process, is to host a variety
 of parent/student meetings and community forums to outline the plan, address questions, and gather feedback. These
 discussions are your opportunity to manage objectives and address issues before the project gets underway. Getting
 these individuals on board from the start and then keeping them active as participants will go a long way toward
 ensuring a smooth rollout process.

Parents and students can provide better insight into the cultures, backgrounds and experiences students bring that can enhance the vision. When students are involved, the teachers and administrators are amazed at the new depth that the initiative develops. Community business leaders can provide insight as to the skills and dispositions need in graduates.



EMPOWER STUDENT VOICE AND CHOICE

Students should be an authentic partner in education and participate in designing their educational experience. Not only do students have a unique perspective, but when they have a voice and ownership in how they learn and how they demonstrate learning, they are more engaged and invested in their educational success. Often, change intended to improve student experiences is done to students rather than for and with them. Purposefully seek diverse and inclusive representation from the students so that all voices are represented.

CONSIDERATIONS:

- Consider providing anonymous student surveys (designed by students) regarding the current and desired state
 within the district. Within the surveys, be sure to include questions about home access, quality of the access and
 accessibility, such as concerns using digital video, using different devices, etc.
- Involve students throughout the process. Examples of how districts have found success include:
 - Including students on implementation planning teams
 - Developing awareness videos about the initiative
 - Involving student summer interns for processing devices
 - Creating student-run help desks that provide technical and training support to other students and staff

It is essential that all students have a voice in every step of the process, from visioning to deployment and ongoing support.

CREATE A COMMON LANGUAGE

Establish a language that reflects the district's vision, core values and learning model. This common and inclusive language will help facilitate effective communication and establish a shared framework to define and assess effective teaching within the learning model, as well as the associated integration of technology.

The current ideas of teaching and learning need to be defined considering the new learning model. For many, "teaching" means providing information to the students with activities to assimilate that information. Learning also should be redesigned with student centered approaches that offer opportunities for students to have options for how they can demonstrate their learning in innovative ways.

CONSIDERATIONS:

- What does a successful learner look like in your district? One approach is to identify the essential characteristics of
 the learner to facilitate a consistent way to talk about learning design and outcomes. Share examples of the essential
 skills and dispositions of a variety of successful learners to help the school community 'see' what this looks like in
 practice.
- Identifying models and examples helps to form your common language. Conduct learning walks to look at current
 practices and identify those that align with the vision and can exemplify the common language being defined. Visit
 local schools to see models of instruction to help formulate a clearer concept of what their common language means.

Once there is a common and shared way to talk about the changes taking place, more in-depth dialogue around designing for learning can take place.



O DEFINE THE LEARNING MODEL TO PUT VISION INTO PRACTICE

Traditional learning environments were designed for the industrial age, when information was scarce, and students went to school to get information from teachers, books and libraries. Today, we live in a world of information abundance. Students need to be curators of knowledge, not only understanding how to acquire knowledge, but also how to use it in meaningful ways. To succeed in college, career and life, they must learn new skills including communication, critical thinking, collaboration and creativity. They also need to develop dispositions like grit and growth mindset that will contribute to fulfilling their potential. The modern learning model should be designed to reflect this reality.

CONSIDERATIONS:

- How can students be empowered to co-design personalized learning experiences with their teachers? Students should have a say in how they will to demonstrate learning through an ongoing process of inquiry, research and open communication. Ensure that students maintain a high degree of control over the time, place, path and pace of their education.
- Build a learning model with flexibility for innovation, societal circumstances and students' diverse needs and interests.

 Technology provides access to the resources, information and functionality that make personalization just a couple of clicks away.
- Extend flexibility to the design of the learning classroom. Space design should support the types of interactions we want to foster. Since instructional strategies differ for different learning purposes, consider designing multiple layouts within the same space and with the same resources.
- Purposefully design your learning ecosystem. With increased access to digital tools, the flow of information, production
 and creation will shift. The physical space of learning can now be a classroom but may also be community areas or a
 home environment. The learning model should purposefully design for the flow of interaction within and across both
 digital and physical spaces using these digital tools.

With a learning framework that is aligned to the vision and has common language, you will be able to focus the use of digital technologies on what is important to designing meaningful learning opportunities for all students.

CREATE A DIGITAL CONTENT STRATEGY

Districts should develop a digital content strategy that aligns to the learning model. Without a strategy, digital technology can become a haphazard collection of possible tools for teachers to learn. Through an aligned digital content strategy, the tools and resources being provided become an integral aspect of the learning process.

Start with the learning model and identify the digital resources and tools that will be needed. Consider the essential skills and strategies students need to be successful and how they will demonstrate these skills with the tools and resources being provided. Next, take an inventory of what is currently being used, determine those that will continue to be used and then add new tools as needed.

CONSIDERATIONS:

- What essential information do students need to access? Access to content becomes easier in this digital world.

 Districts will want to explore what is already available to them such as through Open Education Resources (OER) and provide consistent ways for teachers to organize and provide guidance around the use of this information.
- How will students create? Productivity and creativity tools are essential to empower students to be producers, not just
 consumers. As you support student creativity, consider the needs of the core curriculum and which subject-specific
 tools may be required. Do students need expanded digital opportunities for art, music, graphic design, or engineering?
 Are there specialized tools or resources that will be needed for special programs such as CTE?



- Develop an access plan for the tools and resources that supports student access when and where they need it. Plan how students and teachers will access the many different resources wherever those resources might be located whether locally, on a network or in the cloud. Consider circumstances such as remote learning scenarios for a small group or the whole student body where students must have both device and internet access.
- *Include data in your planning* to help students and teacher make informed decisions about their learning. Many systems have the means to collect a large variety of data, so consider how the data can be aligned or made interoperable. This data will provide insights to answer critical learning questions.
- Define the role of artificial intelligence (AI) will play in your learning environment. As technology continues to become more sophisticated, address if and how to use AI for data analysis to automate standard processes. Some districts are using AI to suggest related content for students, for surfacing learning concerns earlier and to recognize patterns that can inform teachers' and students' decisions about their learning.

An aligned digital content strategy will allow teachers to focus on the aspects of learning design that require their professional expertise.

Put a professional learning framework in place that supports your vision, learning model and desired outcomes. This requires ongoing communication with teachers and leaders. Explain what the initiative will look like and listen to understand what they need to support the new learning practices.

Use the feedback to develop a personalized professional learning plan that gives teachers and leaders the support they need to shape the mindset, teaching practices and technology aptitude to support the desired models of learning. A key goal is to build the capacity for this change so include a leadership strand that includes change management and the structures and process to make the vision a reality.

CONSIDERATIONS:

- Professional learning should model good learning practices. Your professional learning should showcase the types
 of personalized learning processes that have been outlined in your learning framework, utilize the common language
 and embed digital content strategy. Encourage teachers to take risks and experiment with new learning strategies and
 technologies.
- Perhaps start with a small group of teachers who are eager to make this shift. As these early adopters gain experience and become comfortable designing with the new learning framework, they will become models for their peers and will play a critical role in enabling ongoing and progressively expanding waves of success.
- Establish professional learning communities for educators to share and learn from their experiences.
- Personalize the professional learning experience by capturing data on the strengths and needs of the learners, having
 ongoing and sustained professional learning opportunities, which includes development days, follow-up and collegial
 support.

In a modern learning model, teachers are no longer chief content experts, but rather facilitators of student learning and designers of the learning environment. A strong professional learning framework and ready access to student data and an array of personalization tools are essential to support this process.



INTEGRATE DIGITAL WELLNESS INTO THE DISTRICT LITERACY PLAN

Providing access to technology opens the world to our students and staff. With this amazing opportunity comes responsibilities in how we frame the use of digital tools and resources. Focus on Digital Wellness when considering the wise use and integration of digital technologies. Include the aspects of internet and data safety, digital literacy, digital citizenship and wellness.

Today, more than ever, the importance of digital literacy is front and center in society. With most adults and students having access to the internet, the opportunity for everyone to learn is amazing, but with that opportunity comes the need for a new set of skills that most people have not yet attained. The internet is a place where anyone can publish so users must learn how to discern whether the information is reputable or factual.

This highlights the sense of urgency that we must have as we give students and staff access and shift the learning model to be more student-centered. It is important for districts to address the digital literacy of students and staff, because both groups need to understand that their online behaviors and communications have permanency and repercussions.

CONSIDERATIONS:

- Have teachers and students collaborate to produce a digital citizenship code of conduct and a curriculum to support digital literacy.
- Including parents is essential to ensuring that new skills and practices are applied whenever the students are engaging with the digital world. Hosting parent nights around digital literacy topics with student presenters is always a great way to help parents learn these very important digital literacy skills.
- Teachers and students should consider aspects of screen time, choices of tools, and the impact on mental health and social interactions.

Digital tools have a place in education. Districts who lead with digital wellness will involve parents, students and the community in a conversation that focuses on all areas of learning for the students and staff.

SELECT DEVICES THAT SUPPORT STUDENT LEARNING OUTCOMES

With the groundwork for a new learning model put in place, you can now determine what type of devices are needed to support learning. Develop criteria for device selection that are based on learning outcomes. Consider the who, how and where of the device use.

CONSIDERATIONS:

- Think about all students. Most importantly, be sure that the devices you choose suit the objectives for each student group. The needs of high school students, for example, who frequently focus on prose writing, may not align directly to those of young learners.
- Students with special needs may also require different accommodations, typically related to device accessibility. Take
 advantage of operating systems that have accessibility features baked in, which can be supplemented with thirdparty applications like screen readers. Survey students and teachers to see if these accommodations are effective in
 addressing the students learning needs.
- Assess how devices will be used in different scenarios. What are the necessary peripherals such as keyboards, projectors, printers, document cameras, interactive whiteboards, and even some scientific lab equipment? How will they connect to the digital resources identified in the digital content strategy if this might be via USB, WiFi, or other means? Be sure to reference the requirements for computer-based and online testing provided by your state's Department of Education. Finally, consider your special programs such as CTE, the Arts or engineering where a different device might be needed.



- Consider where the devices will be used for all students and courses. Identify components from your digital content plan that require home access.
- Make sure the plan for access to the necessary tools and resources is robust enough to support long-term learning from home scenarios.

The device selection needs to be a thoughtful process involving multiple stakeholders, a focus on all students with a criterion that incorporates your digital content strategy.

Before any devices find their way into students' hands, it's important to ensure that your district's infrastructure, policy and support can sustain the increased use and meets compliance requirements. Bring in a team to assess the existing environment and determine what's needed to get it ready for the rollout.

CONSIDERATIONS:

- Align your infrastructure and policies to support the vision and digital learning plan. Talk with instructional designers
 to determine how and where the devices will be used for learning. Review the digital content plan to better understand
 network requirements. Make sure network capacity, firewall, support and security measures support this use. Survey
 parents to determine if off-campus bandwidth is sufficient and devise a plan to grant students internet access outside
 of class.
- How will the devices be managed? With hundreds or even thousands of new devices pouring onto campus, an effective
 device management strategy is crucial for keeping devices secure and functional, without dramatically expanding IT
 workload and budget. All districts should have some way of authenticating devices accessing the network. If students
 need to access secure networks (as determined in prior steps), then compatibility with existing authentication
 infrastructure should be considered beforehand.
- Having a technical support system in place to troubleshoot and resolve issues quickly will play an important role in teachers' willingness to integrate technology into learning. Consider extending support to parents/families as well. Student technology internship programs can be a great way of providing authentic learning opportunities for students while easing the budget on IT resources.
- Develop a culture of security, backed by a comprehensive technology plan. Several security issues can arise with mobile rollouts, especially when cloud applications are used. Develop a culture by helping people gain an appreciation for the dangers of cyber threats (without a lot of tech minutia) through professional development, regular conversations and phishing tests. At the same time, make sure your cybersecurity profile protects all the way out to the extended edge as opposed to focusing on the traditional perimeter. A security framework that addresses data privacy, process for approval to use applications, how the device will be managed and tracked remotely, how the device is filtered and secured against malware and threats.
- Plan for data storage growth. There will likely be increased demand for storage space to house digital content and student work, with an increasing amount of data in the form of digital video and audio, which can take up even more space. Prepare by choosing a scalable solution that can grow as your needs increase.
- How easily can the infrastructure scale (compute, storage, network) to meet increased demands of a dynamic blended learning environment? Consider how students and staff will access their learning resources if they should be at home.
 Can your current configuration handle large amounts of staff needing to access data and network resources in a secure way?



Don't forget your Acceptable Use Policies (AUPs). These should be adjusted to recognize that the use of the device can occur anywhere and the AUP applies when students and staff are at home, school or in the community. What needs to be considered to ensure the safety and privacy of students before we ask them to use video technologies or place video technology in the classroom for remote connection? Common Sense Media offers guidelines and suggestions for crafting comprehensive AUPs to suit many needs.

Modernizing IT infrastructure can help IT deliver services with greater efficiency, predictability and organizational agility and enhance the student experience.

BUILD A PHASED DEPLOYMENT PROGRAM

A key recommendation throughout this document is to plan. Your actual deployment is no different! Create a fully developed deployment plan that details how students will get their devices and how they will receive training and support. Develop multiple scenarios to this plan that include the safe, secure and safe deployment should students be at home. As students are learning to use their new devices, they will need to know how to set up their email accounts, how to use the systems, and how they can personalize the devices to make them their own. Districts often create websites with this basic information provided in multiple modalities and languages.

CONSIDERATIONS:

- Students should play a key role throughout the deployment process. Student ambassador teams can help with the deployment of devices and be involved in digital citizenship training, and they can act as co-facilitators with lead teachers in technology professional development.
- Pull together a team of students, teachers, instructional technologists, IT administrators and other key stakeholders
 to develop and lead a test run with the goal of scaling up later. This team will be key in developing the plan and
 milestones for the remainder of the project. They will also determine which schools should be involved in the first
 phase, and they can provide instrumental support on their campus when deployment is underway.
- Make sure there are feedback loops with specific time frames including information related to teaching and learning, curriculum, resources, technology, and policy as well as built in at all levels to allow implementation to improve as it moves forward.
- Don't forget to plan for how devices will be managed, securely stored and charged when in school and returned if being sent home. The plan should address how you are handling device deployment, collection, sanitizing, summer storage, and repair.
- Establish support centers for each campus where students, teachers and administrators can get assistance on a variety of issues, including technical problems, functionality support (how to use the system and software), how to perform successful searches, citing sources in the digital world, and much more. Have a plan for how these centers can continue to provide the needed, and possibly increased, support should there be a need for some staff or students to be off campus or at home.

Implementing an effective student access initiative is an iterative process, not a onetime activity. Using this checklist as part of your ongoing planning processes, not only for technology but also professional development and curriculum departments, will help ensure the program continues to evolve with changing needs of the learner, fluid learning models and rapid advances in technology.



Dell Technologies is committed to helping educators drive education transformation to ensure students develop the knowledge, skills and dispositions needed to succeed in an increasingly digital world and a globally competitive workforce. From defining a student-centered vision of learning and facilitating organizational change to delivering technology solutions that enhance the student experience, our team of experienced professionals use an outcome-driven approach to help districts operationalize a vision for learning to support the future readiness of students.

Additional Resources

- Whitepaper: Delivering Secure Access
- Frenship Independent School District
- Round Rock Independent School District



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