

Long Range Technology Plan, 2016-2021 Student Device Standards Secondary Device Recommendation



Purpose



A long range Technology Plan helps our district to efficiently and effectively use technology to ensure students, parents, educators, administrators and support personnel have the support necessary to achieve Northwest ISD's mission and vision.



Objectives

- Support the mission and vision of Northwest ISD
- Support a culture of Future Ready learning through alignment with the Visioning Document, Profile of a Graduate and Profile of an Educator
- Support teaching and learning





Four Domains of Focus

- Teaching and Learning
- Educator Preparation and Development
- Leadership, Administration and Instructional Support
- Infrastructure



Teaching and Learning

All learners:

- have access to relevant technologies, tools, resources and services for individualized instruction 24/7.
- use information and communication technologies to collaborate, construct knowledge and provide solutions to real-world problems.
- use research based strategies in all subject areas to improve academic achievement.
- communicate effectively in a variety of formats for diverse audiences.



Teaching and Learning

NISD Goal:

Provide meaningful, relevant opportunities for all learners to engage in collaboration, communication, creativity, and critical thinking while increasing digital literacy.



Educator Preparation and Development All educators:

- graduate from an educator preparation program that models current technology in instructional and administrative practices PreK-12.
- exit educator preparation programs knowing how to use technology
- effectively in the teaching and learning process.
- develop new learning environments that utilize technology as a flexible tool.
- where learning is collaborative, interactive and customized.
- ensure integration of appropriate technology throughout all of curriculum and instruction.



Educator Preparation and Development NISD Goal:

Effective educators will apply digital literacy as they design, model, implement and assess learning experiences to engage students and improve learning.



Leadership, Administration and Instructional Support

All leaders:

- develop, implement, budget for and monitor a dynamic technology plan to meet the needs of a changing workforce and economy.
- create innovative, flexible and responsive environments to maximize teaching and learning and community involvement.
- Offer expanded curricular and instructional opportunities to students via online, digital technology, and a variety of distance learning technologies
- provide opportunities for sustained, relevant and timely staff development in a variety of formats.
- expect and plan appropriate technology use throughout the teaching and learning process as well as throughout administration.
- Use data effectively and appropriately in decision making.



Leadership, Administration and Instructional Support

NISD Goal:

Provide a foundation of leadership, administration and services that support exceptional teaching and learning through the integration of technology.



Infrastructure

An infrastructure system provides:

- access to all e-learning technologies through ubiquitous broadband resources available 24/7 for all users.
- just-in-time technical assistance to support teaching and learning.
- measures to ensure all data is secure and accurate.
- data standards to support interoperability and accessibility for all users.



Infrastructure

NISD Goal:

Provide an infrastructure that supports an anywhere, anytime learning environment for all.





Student Device Standards

A student device supports *Future-Ready* learning by providing access to relevant technologies, tools and resources for individualized instruction, while promoting student-driven learning. A student device allows for opportunities for self-sufficiency, digital responsibility and lifelong learning by providing tools that cultivate choice and the Four Cs (communication, collaboration, creativity and critical thinking).

Requirements for Learning

- Allows seamless access to instructional materials and digital resources.
- Provides opportunities to collaborate both in and out of the classroom.
- Promotes innovative experiences that are challenging, relevant, and meaningful to the students' lives.
- Creates connections that expose learners to dynamic, real-world content that prepare them to thrive in a global society.

Requirements for Access to Instructional Resources

- Supports access to a Learning Management System for anytime, anywhere learning.
- Maintains an up-to-date environment that is compatible with digital resources.
- Utilizes a filter to ensure an appropriate online experience while providing access to rich educational sites.
- Access to Virtual Desktop Infrastructure (VDI) as a portal to provide a consistent user experience and accommodate more resource intensive software.

Requirements for the Device

- Ability to access resources for both offline and online use.
- All-day runtime to allow for uninterrupted use throughout the instructional day.
- Wireless connectivity support that meets or exceeds current standards.
- Mobile, durable device that withstands daily use.
- Meets the requirements of learners based on their developmental and instructional needs. Requirements may include a touch screen, built in keyboard, pointing device, camera and external connectivity.
- Allows for interconnectability with display devices and other smart devices.
- Built-in customization features that allow for a personalized experience to meet the diverse needs of an individual learner.
- Provides a screen size that meets or exceeds minimum state testing requirements.



Student Device Possibilities

	Chromebook	Windows Laptop Dell 3150	Macbook Air	iPad Air 2
				2.0
Details	Meets NISD Device Standards Native Integration with Google Apps Integrated Keyboard Ease of Configuration Low Price Point Ability to personalize via web app extensions Weight: Battery: 1+days Storage: Operating System: Chrome OS Boot Time: immediate Warranty: 3 years	Meets NISD Device Standards Integrated Keyboard Runs Windows Operating System Weight: Battery: 6-8 hours Storage: 128GB Operating System: Chrome OS Boot Time: 60-90 seconds Warranty: 3 years	Meets NISD Device Standards Weight: Battery: 9 hours Storage: 128GB Operating System: Chrome OS Boot Time: 60-90 seconds Warranty: 3 years	No keyboard Weight: Battery: 1+days Storage: 16GB OS: IOS Boot time: immediate Warranty: 1 yr
Cons	Limited storage on hardware No windows software	Cost, user profiles not easy to move to new device	Sustainability	Input, fragile
Pros	Management, easy user exchange	Windows interface	Ease of use, ease of sharing information	Ease of use, sharing of info
Price Per Device	\$259-359 (includes breakage warranty)	\$550 (includes breakage warranty)	\$1,238 (includes applecare but no accidental breakage)	\$499 (includes applecare no accidental breakage)
Total Cost for 12K Secondary Students	\$4,380,000	\$6,600,000	\$12,384,000	\$5,988,000



Secondary Student Device Selection

- Must meet student device standards
- Sustainability of device is a criteria
- Student testing of possible devices
 - Students across 6-12 grades tested devices
 - Written feedback required from students
- Teacher testing of devices and feedback
- Curriculum and Instruction feedback



Secondary Device Recommendation

Chromebook

- Meets educational requirements
- Exceeds current testing requirements
- Meets all device standards
- Sustainable costs < \$360 each
- Works offline for students with no home internet access



