

Horseshoe Bend School District #73 Technology Plan

2021-24

(Revised 3-18-2021)

Our Mission: Empower Through Education

Our Vision: A school that is celebrated for its academic excellence where students realize their potential and are prepared for the opportunities of a rapidly changing world.

Our Core Values:

- **Optimism**. We are enthusiastic, positive, and we confront problems in a constructive and productive way.
- **Respect**. We believe every person is an individual of worth and value and must be respected and given an opportunity to flourish.
- **Trust**. We are confident in the abilities, integrity, and responsibilities of ourselves and others.
- **Intention**. We act with purpose and focus to achieve and carry out our goals; we know what we intend to bring about and how we intend it to happen.

Our Student Outcomes

- Self-Directed Learner: The ability to be responsible for one's own learning.
- **Community Contributor:** The understanding that it is essential for human beings to work together.
- **Complex Thinker:** The ability to perform complex thinking and problem solving.
- **Quality Producer:** The ability to recognize and produce quality performance and quality products.
- **Effective Communicator:** *The ability to communicate effectively.*
- **Effective and Ethical Users of Technology:** The ability to use a variety of technologies effectively and ethically.

Critical Components

- Infrastructure
 - Vision: Provide adequate wired and wireless connectivity and bandwidth throughout the district which will support instructional efforts and allow for the needs of the future.
- Equipment
 - Vision: Ensure equipment is capable of performing all necessary tasks and operations for grade levels and/or specific courses for all students and staff.
- Student Learning Choices
 - Vision: Implement a plan for advancing students learning, creativity, and innovation in both face-to-face and virtual environments.
- Training/Professional Development
 - Vision: Provide ongoing professional development that supports and encourages effective use of technologies and digital resources that enhance student learning.

Critical Components: Current State

- Infrastructure
 - Student-occupied buildings have reliable wired and wireless access.
 - Exception being Annex Building
 - 15 Juniper Switches, 1 Physical Servers with 10 Virtual Servers, Cat6 Cabling, 1GB to each wired device, 10GB fiber from building to building
 - Sufficient electrical outlets surge-protected at the electrical panel to charge individual devices
 - o Each school has at least one computer lab with desktops
 - Elementary lab and middle school lab layouts do not maximize space available
- Equipment
 - All classrooms have a SmartBoard, with most being new SmartBoards purchased in 2019-20 (elementary) and 2020-21 (middle/high school)
 - Exceptions being computer labs and libraries
 - o All classrooms have a document camera
 - All classrooms have at least one web camera
 - Most classrooms have at least 2 desktop computer workstations.
 - Each school has at least two Chromebook mobile labs with approximately 25
 Chromebooks in each mobile charging cart
 - Elementary School 3 carts
 - One cart is used for grades K-2 and remains in the 2nd grade classroom.
 - Two carts are used for grades 3-5 and both remain in the elementary computer lab.
 - Middle School 2 carts
 - Once cart remains in 6th grade room

- One cart remains in English room
- High School 3 carts
 - One cart remains in the science room
 - Once cart remains in the IDLA Computer Lab for individual Chromebook checkout
 - One cart is stored in teacher's lounge available for classroom checkout (the entire mobile lab is checked out to a teacher)
- Each building, with the exception of the gym building, has a computer lab with desktop computers with wired internet access
- Operating systems and software:
 - Windows 10 Education version 20H2
 - Office 2016
- Student Learning Choices
 - All schools have access to a variety of online applications, but it varies from school to school and class to class
 - Elementary
 - Read Naturally Live
 - Open Court Foundational Reading Program
 - Wit & Wisdom ELA Program
 - In Sync Remote Learning Wit & Wisdom Program
 - Eureka Math
 - Renaissance Place/Accelerated Reader
 - MobyMax
 - Istation
 - iReady
 - Khan Academy
 - Programs used in computer class: Tynker: Coding for Kids, CS First: Google Computer Science for Kids, ABCya!: Letter & Number Learning Games for Kids, Room Recess: Mouse Exercise games
 - Middle School
 - No Red Ink
 - Coding elective class which includes basic robotics
 - High School
 - No Red Ink
 - Intro to Computer Science elective class which includes basic robotics
 - Remote options
 - IDLA: Business Computer Applications, Exploring Computer Science, AP Computer Science, App Development, DC Computer Science Principles, Dc Intro to Programming, DC Web Development
 - PRT2A: Computer Applications
 - Google Classroom is also used as the primary Learning Management System in a remote learning situation

- Currently, no classes are being taught to foster basic technology skills (i.e. Computer Applications), with the exception of keyboarding in the elementary school.
- Currently, no formal classes/training exist for students to learn about internet safety, cyberbullying, etc...
- Training/Professional Development
 - All K-12 teachers have received training in providing effective online instruction (COVID) using Google Classroom.
 - Elementary teachers have received formal training on using new SmartBoards, and training has been made available to middle/high school teachers on making full use of the features available on the new SmartBoards.
 - o Select elementary staff members have received training on Istation.
 - Select elementary staff members have received training on iReady.

Critical Components: Moving Forward

Infrastructure

- Ensure technology systems (servers, switches, etc...) are kept current to ensure new technologies function optimally
- Ensure all district classrooms, offices, and labs are provided access to wired and/or wireless high speed internet
- Reconfigure elementary computer lab set-up to be more conducive to teaching and learning

Equipment

- Purchase enough Chromebooks and mobile labs to ensure a 1-to-1 ration in the middle/high school
- Maintain current levels with working Chromebooks and mobile labs in elementary school
- Create criteria and timeline for a "refresh cycle"
- o Ensure printers can cloud print if needed

Student Learning Choices

- Provide instruction to ensure students are technology literate
- Provide instruction on internet safety
- Training/Professional Development
 - o Offer courses to support integrating technology as a routine instructional tool.
 - Use a train-the-trainer model with those who gain technology use knowledge in offsite professional development