

**Johnson County Schools  
District Technology Plan  
2020-2025**

**District Mission Statement**

At the Johnson County Schools, we are committed to our vision of the highest levels of teaching and learning, supported by these four critical elements:

**Collaborative Culture:**

Collaboration is purposeful, constant and regularly scheduled, where everyone works as a team, sharing both instructionally successful ideas and challenges between and across grade levels.

Parents/guardians are willing, knowledgeable, and active partners in the learning process to support student success.

**Quality Instruction:**

Instruction is a reflection of the teacher's high expectations for students and the teacher's deep understanding of the grade level content.

Teachers model a love for learning and show their belief in students by creating a positive environment where success is possible.

Students show their success and learning in a variety of ways, creating relevant work and tasks which give a complete picture of their progress.

**Resource Utilization and Development:**

Research-based resources for all subject areas are consistently available for teachers to use in student interventions and enrichment.

Technology is regularly and effectively implemented in classrooms to support deep levels of student learning.

Professional development is ongoing and includes regular support, resources, and follow up to require classroom implementation to strengthen student success.

**Leadership for Change:**

There are written and consistent guidelines and procedures to provide ways of sharing important information throughout all levels of school and district work.

The district develops teacher leadership to promote quality and cohesive instruction, and a continual focus on students.

Leaders view teacher effectiveness primarily in terms of student success.

## **Technology Mission Statement**

The Technology Mission of the Johnson County School System is to incorporate technology as a tool for teaching, instruction and learning that will enhance education and the preparation of our students for a productive future in a technology based society.

## **Stakeholders / Participants**

Dr. Mischelle Simcox, Director of Schools  
Dr. Stephen Long, Supervisor of Secondary Education  
Mrs. Angie Wills, Supervisor of Elementary Education/Federal Programs  
Mrs. Paula Norton, Supervisor of Special Education  
Mr. Robert Sutherland, Director of Technology  
Mr. Norm Dickens, Technology Lead Technician  
Mrs. Tina Lipford, Finance Director/E-Rate Coordinator  
Dr. Brenda Eggers, Principal (Laurel Elementary)  
Mrs. Lonna Smith, Counselor (Johnson County Middle School)  
Mrs. Terri Henson, Site Technology Coordinator (Mountain City Elementary)  
Ms. Priscilla Davis, Site Technology Coordinator (Johnson County High School)  
Mrs. Cheri Long, Principal (Roan Creek Elementary)  
Ms. Sadie Lundy, Teacher (Doe Elementary)

## **Technology Goals and Strategies**

The Johnson County School System outlines the following goals and strategies to provide its teachers and all students (special consideration given for students who have insufficient access because of race, gender, disability, economics status, or special needs). We strive to provide equitable opportunities to use a wide variety of technology associated resources for the enhancement of learning in alignment with the state academic standards. These goals and strategies include the purchase of additional computer equipment and software for increased student accessibility, as well as the innovative approach of using on-line resources that provide technology tutorials, educational links, and teaching tools.

### **1) Continue to develop and deploy a technology infrastructure that allows us to install, maintain, and support the school system's technology in place to enhance learning.**

Make use of technical staff already in place at the district level to effectively diagnose and correct technical problems. This includes network/file server issues, hardware repair, internet and connectivity maintenance, software installation and support. The technology staff currently performs all installs, repairs, networking, etc., pertaining to computer equipment, allowing sufficient response and correction to all problems.

Careful selection and standardization of hardware, including file servers, computers, video equipment, and printers.

Maintain common system software versions, and upgrade all computers in the district when moving to a new version of district standard software packages.

Offer online or web-based tutorials and training in basic troubleshooting of common hardware and software problems.

Continue to utilize the system web based work order process by which teachers and staff can easily report technology related troubleshooting and repair requests.

## **2) Incorporate the technology tools needed that effectively support classroom instruction.**

Continue to install additional computers and chrome books, to allow students and Teachers equitable access to technology in all school buildings.

Maintain and upgrade stand-alone and networked software programs currently utilized at each school.

Provide productivity software to help teachers and students include technology into everyday classroom operation.

Continue providing projection equipment, media players, ITV's and other devices required to create and view classroom presentations available at each school.

Maintain and upgrade all aspects of the school network to ensure proper utilization of the technology resources at each school site.

## **3) Integrate technology into the curriculum providing students an increased opportunity for academic achievement.**

Continue using software and online products to support classroom instruction, such as BrainPop, Accelerated Reading, Canvas, IXL, Study Island, MobyMax, Discovery Education, etc.

Continue incorporating computer skills based courses.

Take advantage of online reference databases such as TEL.

Upgrade software versions and continue network access to the Follett software program currently used in the media centers.

Use online resources available for currently used textbooks, such as Savvas Easybridge, MyHRW, ThinkCentral, etc.

Incorporate other software and online material that becomes available that will enhance and facilitate the educational goals of the Johnson County School System.

## **4) Provide the continued advancement in technology training needed to insure teacher literacy and effectiveness in teaching through the curriculum.**

Encourage/allow teachers and staff to attend local, regional, state, and if possible, national conferences to further their understanding of the use of technology.

Provide access to and links to on-line tutorials on the school system web site that will offer training and support for the common software applications and hardware in use in our school system.

## **Network Connectivity / Communications Assessment**

All school facility classrooms and support offices are wired/equipped with at least Category 5e, 1000 Mbps switched backbone Ethernet networks. Servers exist at the building level to handle application/file sharing, Active Directory file storage, DNS and DHCP service. Adequate network ports, wireless connectivity and workstations are available in each facility for network and internet connection. Wireless Access Points (APs) are available in each classroom and in common areas such as gyms, library's and dining areas to provide a reliable umbrella of Wi-Fi coverage throughout each school district wide.

The Johnson County School System operates with a direct 2000Mbps Fiber Optic Wide Area Network connection to the Johnson County Board of Education Office for each school facility. Our egress from the district office to the Internet is available at 6Gbps with a planned increase to 9.9Gbps in the 2021-2022 school year.

These connections provide access to locally networked software programs as well as Internet access. If the demand for bandwidth increases, additional bandwidth will be planned for in order to meet the minimum demand at each school facility.

With the exception of about 17 analog lines for fire alarms, all local telephone service is now delivered through a hosted Voice Over Internet Protocol (VOIP) solution that is provided by Education Networks of America and managed locally.

## **Professional Development**

Johnson County Schools believe that the key element to successfully accomplishing this technology plan is to maintain a well-trained teaching staff that understands how to use the technology tools they have access to, and how that technology relates to the learning environment that they have in their classrooms. Teachers and staff members are encouraged to attend various state and local technology meetings, conferences, and training sessions. As these training session and workshops are completed, our teachers will not only learn how to use various programs and new teaching tools, but how they can effectively incorporate them into the curriculum and share them with their fellow educators.

## **Technology Hardware**

Johnson County Schools knows that without proper technology hardware and software resources in place, teachers and staff cannot properly utilize and implement technology instruction in the classroom. Our technology department will continue to upgrade aging hardware as it becomes necessary and feasible, with a focus on Interactive Classroom TV's, Computers and Laptops, and wireless Access Points and Controllers to provide the best user friendly and technology based classroom environment.

## **Promote Teaching Strategies and Curriculum that Make use of Technology**

Johnson County School System recognizes that the promotion, proficiency, and useful strategies of technology integration must exist through all levels of instruction. We will continue to

accomplish this with the programs and tools we already have available in the district, and with new tools as they become available to the school system. The system attempts to regularly upgrade current hardware and software components, and install new technologies as they become available to assist teaching technology in the classroom

Another key factor is teacher proficiency of technology. Teacher proficiency is increased and enhanced through staff development, online resources and tutorials located on the Internet, and collaboration with technology-advanced teachers to complement this process. We believe that 95% of the teachers in the Johnson County School System are using technology on a daily basis to support and enhance the curriculum.

The use of technology will continue to be enhanced as the timeline and strategies below are implemented.

### **Implementation Timeline / Strategies**

**Strategy 1:** Continue to upgrade existing school lab and teacher classroom hardware to facilitate a productive teaching and learning environment. This includes not just computers and associated peripherals, but also the replacement of outdated Smart Boards with Interactive TV units (ITVs).

**Strategy 2:** Continue to acquire and implement mobile technology for use throughout the schools such as Google Chromebooks. This provides an easy to use, stable platform for Internet based instruction and learning that requires minimal software maintenance and updating.

**Strategy 3:** Investigate the potential for upgrading the existing district-wide Wi-Fi (802.11a, 802.11g, 802.11n standard) network to upgrade it to the latest connectivity standards, providing enhanced bandwidth and reliability to meet the ever-increasing demand for wireless connectivity.

**Strategy 4:** Support and streamline the use of online and virtual learning programs for students and teachers. These programs include websites and online software such as Discovery Education, Edmentum, Canvas, Plato, BrainPop, IXL, Study Island, Accelerated Reading, Benchmark Education, Class Dojo, Mastery Connect, MobyMax, MyHRW, AIMSweb, Think Central, Savvas Easybridge, Raptor, as well as other resources that are in place and used in the classroom by teachers.

**Strategy 5:** Continue using specific Mobile Device Management (MDM) packages to maintain and deploy software to individual and classroom based devices (Chromebooks, iPads and Windows based computers) throughout the district.

**Strategy 6:** Provide and maintain e-mail accounts for all staff, faculty and students district wide.

**Strategy 7:** Research available products and implement a barcode-based inventory management system into the district to replace the existing Microsoft Access based inventory software. This will make it easier for teachers and administrators to perform an accurate inventory and assessment of technology hardware throughout the district.

**Strategy 8:** Continue to utilize and develop the Clever Portal online software site to centralize online programs and access for all students district wide.

**Strategy 9:** Develop and publish online tutorials for basic computer use and software programs that teachers and students can access to assist them in understanding how to more effectively use the programs they have.

**Strategy 10:** Continue to send teachers and staff to various training sessions and conferences that allow them to enhance and develop their technology skills.

**Strategy 11:** Continue to utilize the School Dude online work order system to effectively report and categorize technology and maintenance issues throughout the school district.

**Strategy 12:** The Technology Department will continue to perform all troubleshooting duties such as computer repair, hardware upgrades, replacement and new installations, network administration and wiring that are not resolvable by building level technology representatives and staff.

**Strategy 13:** Encourage and promote proper internet safety throughout the district to both staff and students. This includes frequent evaluation of our policies and firewall rulesets to prevent access to unauthorized sites and resources.

### **CIPA Compliance**

Johnson County Schools utilizes internet service and content filtering obtained through the state consortium contract, in which Education Networks of America is the provider. The district's current or pending policies and procedures (e.g., acceptable use of the Internet, Student Internet safety, and digital copyright) relating to the use of educational technology is provided to students and parents annually via the Johnson County School System Handbook and our district website.

### **Evaluation / Assessment / Accountability**

Working in conjunction with our school administration and staff members, the Johnson County Schools Technology Department is provided information on the technology needs at each school by various methods. In most situations, the needs at each school is determined by the school's administrators. Also, suggestions are made for improvements by individual class, subject, grade level, and special needs and then are implemented by the technology staff by a process and configuration that best supports that school facility. In addition, the technology staff is continually searching for hardware and software solutions and innovations that correlate into the system scheme for technology integration into the curriculum.

The instructional staff at each school facility reviews the electronic data and feedback that can be generated by the software packages already in place in their schools. This includes software packages such as Edmentum, Plato, IXL, Study Island, Accelerated Reading, Benchmark Education, Class Dojo, Mastery Connect, MyHRW, AIMSweb, Think Central, and Savvas Easybridge, The feedback and data obtained from these programs assist our teachers and staff in monitoring student progress and can help in determining certain key areas of subject material that need to be reinforced in the classroom. The overall learning process can also be assessed by TCAP scoring.

Johnson County Schools feel that our goals have successfully been achieved when our teachers and students are confident technology users and understand when and how to apply appropriate technology tools to the various teaching and learning tasks that evolve in their classrooms. This can best be evaluated per individual progress based on teacher and student created material and overall student achievement.

### **Parental Involvement**

Johnson County Schools currently encourages parental and community participation in the enhancement and education of our students through technology. Several different activities and technology-based processes are in place to accomplish this task, including the use of e-mail and social media portals for communication.

Parents can access school related information via the Johnson County District web site, or through the individual school web pages. Our web pages may also contain links to other resources that are easily accessible by students and parents from their homes. In addition, the web based Skyward Student Management Software portal is in place and available to provide access for parents to check their children's educational progress.