## Quitman County Schools

Georgetown, Georgia

# Three-Year Technology Plan

# July 1, 2018 – June 30, 2021

# District Technology Coordinator

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# Superintendent

Victoria Harris

1. Vision for Technology Use ***Compose an overall mission and/or vision which describes the steps the LEA is taking to ensure all students/teachers have increased access to technology. Include a list of specific vision statements for system educational improvement over a three-year period***

The mission of the Quitman County School System Technology Department is to provide and support an environment in which all stakeholders — students, educators, support staff, parents, and the community — use technology as a tool in all facets of the educational process. Technology will be utilized to ensure that all students, including those with disabilities, have an equal opportunity to access technology, to graduate high school, and to be successful in an information-driven, global society.

Quitman County School System wants to be recognized as a world-class school system that holds a vision of excellence for all students with a 100% graduation rate with successful student progression at each level. The district's mission: To ensure the academic success of each child, each day, no excuses.

It is imperative that education remain relevant to the age in which we live. The ability to gather, manipulate, and present data using technology as the medium is a required skill in the emerging global community. Technology promotes the development of essential higher-order thinking skills in a life-long learning model of education. The use of computers and other technologies for problem solving has been identified as an integral component for a student’s success in higher learning and in the new workplace. The Quitman County School District’s vision for technology is that students will be fluent in the use of technology so that its application becomes commonplace for them.

Technology can captivate and engage students thereby impacting academic achievement. In order for technology to have maximum effect on academic achievement, professional learning for teachers is imperative so that they feel competent in the ever-changing roles of technology thus enabling them to fully implement the resources available to them. Our intranet facilitates training and technical support to all district employees. Technology trainers provide professional development opportunities focusing on available technologies with a student-centered focus.

Technology is a resource for expanding and creating new options in education. Teachers utilize technology in two ways: for the delivery of instruction and as a professional tool. In Quitman County, integration of technology into the curriculum is expected, and, as more teachers are becoming comfortable with computers and software, this is becoming a reality.

As the district works toward providing students with an integrated curriculum relevant to their needs, technology becomes an essential component in instruction. Believing that, uniform technology integration standards will be implemented across all grade levels to develop progressively more sophisticated levels of technology use. Teachers will integrate technology on a daily basis with an increased focus on student uses to promote higher-order thinking skills and performance-based assessments. Students will use technology resources to access and apply information to solve problems, communicate ideas, and reinforce academic skills. Students will use interactive devices such as whiteboards, instant assessment devices, scientific probes, laptops, and calculators to conduct experiments, present information, manage data, and demonstrate understanding of concepts.

Handheld technology items will accelerate the implementation of research-based best practices in instructional technology. In addition, this technology will support rigorous evaluation of programs, particularly regarding the impact of these programs on student academic achievement and the Georgia Performance Standards. Although past expenditures have introduced students, teachers and leaders to basic technology, future purchases will not only allow students, teachers and leaders to compete with more affluent areas, but will also prepare students, teachers and leaders to compete internationally. Professional development to integrate technology will not only be given to the teachers but the students as well.

In order to support the delivery of instruction, the focus will remain on maintaining and increasing the accessibility of technology in all schools. We will continue to increase the number of 21stcentury classrooms. As a standard, all new construction will be wired for 21stcentury capability. Existing classrooms will be upgraded to include the minimum of a ceiling-mounted projector and an interactive whiteboard device. Teachers will increase the utilization of stationary computer labs, mobile wireless laptop labs, hand­held devices, interactive whiteboards, instant assessment devices, and video-streaming to provide meaningful instruction and curriculum enrichment.

Administrators will provide leadership by modeling confident and effective uses of technology and telecommunication tools. Key administrators such as principals, counselors, and school resource officers will be provided mobile computing devices that will afford them increased productivity and immediate access to critical information. Administrative efficiency will be enhanced through the use of PowerSchool, a web-based student information database; web-based instruction; professional development; system-wide email; and video conferencing via the Internet and intranet. Administrators will use online and software-based testing resources to disaggregate data. This data will be used to focus instruction and strategies to enhance learning for targeted subgroups.

In an effort to improve community perception, a high priority is placed on home/school communication. Power Teacher Parent portal will be effectively utilized FY19. Student grades, assignments, and attendance will be available to parents through secure logins to the system. Email presently serves as an important communication tool between parents and teachers. Links to teacher email addresses are provided on all school websites and will be available from the parent portal in PowerSchool. Our school website is an instructional resource for parents, teachers, students and the community. Every teacher in Quitman County School District have their own website to provide resources and information regarding homework, assignments and other activities going on within the classroom.

1. Current Reality ***Identify your data sources. What data does your technology inventory survey tell you? Compose a narrative analyzing the gap in access to technology across the district. Address the following groups—instructional, administrative, parent/community, system readiness/system support—personnel/resources.***
2. ***Access to Technology/Data Sources***

The school and the system maintain inventories on all hardware, software and peripherals. The state hardware survey conducted each fall is examined to determine areas of need within the schools. State QBE, local technology, and applicable federal funds are used to fill in the gaps so that all students in all schools have equitable resources. Within the schools, resources are distributed so that all teachers and students have access to technology and Internet access. All technology purchases are made based on the instructional value to meet our goals of increasing student achievement.

Media centers and computer labs are scheduled flexibly so that students and teachers can access resources quickly and easily. Media centers have 14 up-to-date computers for use with the Alexandria circulation/catalog system in addition to the computers used for Internet research and other software applications. Video distribution is installed in every school and is linked to every classroom. All classrooms have at least three desktop computers. All of our classrooms have mounted projectors, Apple TVs and and/or interactive whiteboard. Digital cameras are available for teacher and student use in the media center.

The District has three instructional computer labs, all of our teachers have a MacBook Air, iPad Pro/Ipad Mini. We have been a 1:1 school since FY15.

For security purposes the system uses NOD32 for its virus protection on workstations and servers. The e-mail server uses Fortinet Anti-virus program and Barracuda to scan emails for spam and viruses. Fortinet is the systems’ content filtering device that protects the system from would be hackers and also keeps students and employees from accessing inappropriate websites. We also utilize, NetSpective which is a sophisticated Internet content filtering appliance that maximizes the performance and security of our data network by eliminating undesirable web traffic. Everyone that accesses the school systems network is required to login with a user id and password and must agree to the acceptable use policy before permissions is granted to access the network.

Students have access to basic application software (Microsoft Office, Apple iWorks, Pages, Keynotes, Numbers, and other independent content-related software programs. Various networked software is available for instructional use, tutorials, simulations, and monitoring of student achievement, i.e. Study Island, LLI, Accelerated Reader, STAR, and etc. Students with disabilities have access to software that assists them in various other areas. Assistive/adaptive peripherals are available to meet student/teacher needs.

The system maintains a web site that provides up-to-date information regarding school activities, calendars, and general information. Parents may find information about their child’s school on the school’s individual web site, linked through the main system web site. In addition, parents may contact teachers and administrators through email.

1. ***Technology Use –***

***Instructional uses of technology***

The Quitman County School District provides many ways for teachers to use technology in the classroom. Projectors, sound systems, multiple computers in the classrooms and instructional software packages are just some of the means the system offers to ensure teachers have every tool necessary to effectively educate their students. Teachers can communicate with students and parents through the school system’s website, and through email. This helps to get parents involved in the education of their children which is extremely important to student success.

In order for teachers to use the technology effectively, the school system has provided high speed network with drops and switches in every classroom that allows full connectivity to the school systems network and to the Internet. Students and teachers have access to One Drive, DropBox and iCloud to retrieve their data. Wireless access is also available throughout our system for teachers and students to utilize. Along with this, the school system provides a technology director that is capable of attending to all the technology needs (troubleshooting, installing, maintaining, etc.) the system may have.

***Administrative uses of technology***

The Quitman County School System provides all Principals, Department heads and other administrators the technology that is needed for them to effectively do the work required by the board of education, parents and students. Each person is provided with a computer, or computers, and all software they need to do their work. Servers that are very capable of handling the school system’s needs are setup and maintained by the Technology Director.

* PC Genesis, the accounting program, is used for all financial aspects of the school district. This program is a client-server-based DOS program written in COBOL. Access is limited to central office employees only. All district financial, personnel, and purchasing information is controlled and managed through the PC Genesis program. Quicken is used at the school level.
* PowerSchool, the student information software, is setup so that schools can input all student data record information quickly and accurately and is supported by the SIS coordinator, who is also our Technology Director. The Counselor and SIS Coordinator input all student data into the program.
* Office 365 Outlook is the email system the entire school system uses for effective communication between parents, students, administrators, teachers and other individuals that are involved in the day to day operations of the school system.
* Go IEP is the software package of choice for the Special Education Department and it is used efficiently and effectively to write IEP’s and specialized student reports as well as tracking due dates for student evaluations.
* Office 365 and Apple Applications are provided to every teacher and administrator for everyday creation of documents and spreadsheets as well as Power Point presentations.
* Simbili is an online program used by the Board of Education to provide parents access to online board policies.
* SchoolInsites is the hosted choice of our school Website. We have three websites: The district, elementary/middle school and the high school. All of our teachers have their own personal page to distribute valuable information and resources to parents and students.
* Wireless access to our system’s resources and guest internet connection is widely available throughout the system assisting in e-mail access and presentations.
* All teachers maintain an electronic grade book called PowerTeacher which is a component of PowerSchool. Schedules and student demographics are populated in teacher grade books as part of the integrated student information relational database
* TimeForce Time clock finger print reader is used to enhance the accounting and payroll responsibilities for use with all personnel.

***Parent/Community uses of technology***

Technology is an essential part of parental and community involvement. The Quitman County School System utilizes the following technologies to keep stakeholders informed:

* The Quitman County Board of Education utilizes Simbili to post online board policies, on the Internet;
* The school system has a website at [www.quitman.k12.ga.us](http://www.quitman.k12.ga.us) that contains information about the schools and the district;
* Progress reports may be generated through the teacher grade book program, and these reports may be emailed to parents as needed; in addition, parents can receive daily, weekly or monthly reports via PowerSchool Parent Portal
* The school system utilizes School Messenger an automated rapid-calling system, used to notify parents of upcoming events, closings, and other important information; and
* The school system utilizes email and telecommunications to remain in two-way contact with parents.

1. ***Gap Analysis -***

***Instructional uses of technology***

QCS will continually evaluate their usage to ensure that the existing systems are being used to their fullest extent. Outdated hardware and equipment are a concern district-wide. A short-term budgeting goal will include replacing outdated and obsolete equipment that can no longer function within the network and utilize necessary instructional programs. This process is a crucial component of maintaining an effective and modern student-to-computer ratio.

Currently all of our technology has been updated from computer devices, to wireless access to network switches. Through School Improvement Grants and Apple Connect Ed Grants, Quitman County School District has successfully closed the gap.

***Administrative uses of technology***

As with the teaching faculty and staff, ongoing professional learning is needed to ensure that users take advantage of existing equipment and applications. Building- and district-level administrators have a growing need for technology literacy in terms of data management. The use of data as the foundation for instructional decision making continues to increase, and administrators must be able to assimilate and utilize data on demand and in real-time. Ongoing training and support are required to make certain that data is used effectively.

The PC Genesis program is the school system's oldest administrative system; it is quickly becoming obsolete in its current form. Only the central office staff members have access to this program. All purchase orders must be processed with the information from the requisition being reentered into the PC Genesis program. A joint evaluation is performed between the finance and technology department to assess the continued use of this program.

The website offers a variety of tools and resources that will effective communication from our teachers to the parents. However, it is not being used to its full potential. Monthly training classes will be held with faculty/staff regarding their individual pages until they are comfortable making changes on their own. The Increased training and support for faculty and staff will guarantee they have the skills necessary to utilize the school system's website in a manner that maximizes benefits for parents and the community.

***Parent/Community uses of technology***

While the school system's website features basic information about upcoming events, calendars, menus, and pages for each of the schools, there is a need to expand its use. Ideally, individual grade levels, departments, and/or teachers should be able to post information. Increased training and support for faculty and staff members is needed to guarantee they have the skills necessary to utilize the school system's website in a manner that maximizes benefits for parents and the community

Online access to a secure parent portal — has not been available for parents. This access to information was once considered novel by some but is quickly becoming a standard expectation of parents. Ongoing support from the school system is needed to ensure this procedure be put in place and once it is in place continue to be offered and remain functionally reliable. Training opportunities should be provided, as needed, so parents understand what will be available and how it may be accessed.

### **Communication and Marketing**

***Describe strategies to share system progress, disseminate evaluation results, encourage broad stakeholder involvement, and market the role technology can have in helping students achieve in innovative ways. How are we sharing what we are doing? How can we show that the way we are sharing is meeting our needs? How are we encouraging more people to be actively involved with the system?***

1. ***Communication/marketing***

The school newsletter, Facebook, Twitter and news broadcast will be used as a vehicle to disseminate the technology progress of students and teachers for workshops completed, multimedia projects, and website design. The classroom and corridor walls, the media center and lunchroom will be used as display areas for students work.

All instructional staff will post within visual sight of a computer a copy of the Internet Use Policy in classrooms and other areas of the school where computers are used, as a reminder to users of technology guidelines for use.

The technology director will report on the school website and District Facebook Page regarding new technology for the system, access to the system by parents, workshops, and the results of technology activities and performance by students, including those awarded with certificates of completion. The community will be informed of any computers placed in public areas for access to the school via website. Parents will be informed at 21st CCLC After-School Meetings, Parenting Workshops, and Title I Meetings about training for computers and the Internet.

1. ***Integration/Coordination with Long-Range Planning Initiatives***

Recognizing that the role of technology is increasing and becoming more intertwined with the overall fabric of instruction, the principal and technology director work collaboratively to plan and implement instructional efforts that utilize technology. These efforts are formulated based on the needs of the district identified within the district school improvement plan and the Comprehensive Local Implementation Plan (CLIP). These plans are continuously updated by the district- and school-level leadership teams to reflect the needs of all student learning populations within the school system.

IV. Professional Development ***Describe how the local educational agency will provide professional development and ensure that specific funds like E-Rate and other sources are spent on scientifically and/or evidence-based practices in relation to the purchase of technology and technology tools.***

1. ***Professional Development***

Research regarding technology integration should be utilized to make sound educational decisions regarding the type of technology-based professional development needed for maximizing student learning. It is also needed to support all decisions regarding the types of hardware and software applications needed for classroom use. The focus of these decisions should always be to ensure all students have the opportunity to learn and succeed as they master the performance standards.

A critical component of a successful technology program is the availability of quality training coupled with ongoing support. The integration of technology with the curriculum requires faculty and staff members to acquire new skills and to explore alternative approaches to the delivery of the curriculum through the use of universal problem-solving skills within new contexts.

Professional learning programs are clearly developed to provide ongoing training on critical systems and concepts. The Quitman County School System Technology Director and the school Administrators participates in and assists with the planning and implementation of professional learning. New application and product purchases have a portion of funding dedicated to professional development. Every new district-level software product that is purchased includes either locally- or vendor-provided orientation or operation training. Workshops, in-services, classes, and reflective activities are designed to develop effective and useful strategies that support the school district’s improvement goals especially in the area of student achievement.

Chattahoochee Flint RESA, and Apple in conjunction with other continuing education centers, offers professional learning workshops and activities that help to address curriculum areas and school improvement goals. Self-directed learners are provided the opportunity to participate in on-line courses to enhance authentic connection to their specific individual needs. Quitman County School District provides specific learning activities tailored to the student population and individual school improvement plan.

Professional learning funds are allocated to ensure the proper support for and quality offerings within the development programs. By focusing on assessment and proper implementation of the standards, the school district is able to further identify areas of strength and weakness as plans are made for the professional learning program for each upcoming school year.

Involving parents in technology integration at the school level is of utmost importance to Quitman County Schools as parental technology literacy and support for instructional technology integration are imperative to Quitman's students’ academic success. We believe that technology literate parents that support the integration of instructional technologies into the curriculum are a true asset as parents play a key role in a student’s academic success. We provide loaner MacBook Airs to our parents on a check-in/out basis. Parents are allowed to keep the device for up to two weeks.

Internet connectivity has become an essential component of instruction. Connectivity now supports instruction and communication throughout the schools and between the schools and community. A reliable, high-speed network managed by robust connectivity switches, servers, and other hardware, which is connected to the Internet, is essential for the effective operation of the modern educational program. E-Rate funds are a crucial part of the overall funding necessary to acquire and sustain all connectivity endeavors.

All software applications relate directly to education with an emphasis on student learning and success. The district instructional and professional development programs assist teachers in targeting and improving their professional practices through the use of technology to promote student mastery of the performance standards.

1. ***Technology Sustainability***

The Technology Coordinator/Director has developed recommendations that would continue to the district in its desired state. These recommendations, while general enough to allow flexibility as technology changes and advances, is also specific enough to move the district forward in regard to technology and technology integration. Each of these components will allow Quitman County School District to continue to have a robust, technology rich school district. Many of the critical components will overlap one another as they may be dependent upon each other to fully implement.

1. ***Infrastructure:***1. Create an environment district-wide that will support online learning, virtual classrooms, and a variety of hardware and software resources to increase student engagement and learning.

This environment is necessary to accommodate the many changes in education. Staff, students, and parents alike benefit from a digital learning environment. These tools will be used by staff to augment what they are already doing in the classrooms. This environment must be available to students and staff both inside the school walls and offsite. We want parents to play an active role in their child’s education, and to accommodate this, parents need to have access. This will enhance student learning as students, staff and parents become more comfortable utilizing a variety of online resources.

1. Ensure technology systems (servers, switches, access points, etc.) are up-to-date and kept current to ensure new technologies function optimally.

For this technology plan to be effective, it is essential that the physical architecture be robust enough to handle not only technologies of today, but also scalable to ensure future needs can be met. As systems age, it is important to establish a refresh cycle that will examine infrastructure needs and ensure they are operating effectively and efficiently. This includes electrical systems, HVAC systems in areas where edge equipment is used (servers, switches, etc.), Wireless connectivity, servers, switches, as well as end user devices. It is also essential to monitor bandwidth usage and increase bandwidth as necessary. These updates will ensure a system that is operating smoothly.

File storage will have to continuously be monitored as staff and student use increases. Currently files are kept inside the walls of the school district through a cluster environment that ensures data redundancy and backup, thereby reducing the chance for data loss. In FY19, we implemented Apple School Manager iCloud Storage and Office 365 One Drive Storage. Implementing this system allowed our end user to have over 300 GB of storage space. This cloud storage also allows for end to access their files when they are not on school grounds. This will also greatly reduce the amount of server capacity that is needed in the district.

1. Ensure all district classrooms, offices, labs and media centers are provided access to wired and/or wireless high-speed Internet.

If the expectation is that technology will be used to improve and enhance instruction and learning, robust Internet access is critical. Currently all classrooms have wireless access points installed that are powered by Aerohive. As well, access points are strategically located in office areas, gymnasiums, and cafeterias to allow wireless access. However, as technology increases, so will the demand for connectivity. The current system, although new, will need to be evaluated periodically to ensure all devices have sustained connectivity.

As prevalent as wireless connectivity is, it is still imperative to have wired connectivity throughout the district. This will ensure a redundant network so that downtime will be kept to a minimum. Bandwidth utilization will need to be monitored ongoing to ensure a reliable connection, both wired and wirelessly.

1. *Equipment*
2. Quitman County School District will provide access to age-appropriate technology tools that will support student engagement and learning.

For the effective integration of technology into the instructional practices of educators, the district must ensure students and staff have access to current, age-appropriate, effective technology tools. True technology integration can only occur when all learners have access to the necessary tools in the classroom.

1. Implement a multi-phase vertically aligned technology initiative

A vertically aligned initiative means that students will learn grade and age level appropriate technology skills. This scaffold approach will ensure students gain the knowledge and skills necessary to be academically successful and well prepared for college and careers.

1. Create criteria to determine the value of equipment

Technology has a set life expectancy and as such the district needs to create a set of criteria to help determine when to update or refresh technology. The district’s IT department has already begun a refresh cycle that will be evaluated and modified to fit the current and future needs of the district. This will ensure district technology does not become obsolete.

1. Ensure equipment is refreshed at the appropriate interval

The district believes that if staff are expected to effectively integrate technology into their daily instruction, they must have access to a dedicated device. This plan will ensure all instructional staff have access to an appropriate device.