



Rockdale County Public Schools

Three-Year Technology Plan

2018-2021

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RCPS Technology Plan

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RCPS Technology Plan

I. Vision for Technology Use

Technology Mission

The Rockdale County Public Schools Division of Technology is committed to implementing a world-class, reliable, comprehensive and secure infrastructure while providing professional learning in support of the System's Strategic Plan and Priorities.

Technology Vision

To have a world-class, technology-rich learning community where leaders, educators, parents and community members ensure students graduate college and career ready.

Vision for Technology Use

It is the vision of the Rockdale County Public Schools (RCPS) Division of Technology to provide a world-class technology-rich learning community. To achieve this vision, it is necessary for school and central office staff to work collaboratively to plan technology-enhanced and integrated learning experiences. Technology leadership meets regularly with leaders from the Division of Teaching & Learning to ensure aligned resources, processes and communication. Additionally, Digital Learning Specialists (DLS), Curriculum Team Members and some school-based coaches meet regularly to discuss Content, Pedagogy and Technology (TPACK). During these meetings, they create coaching caseloads, learning objects and bodies of best-practices.

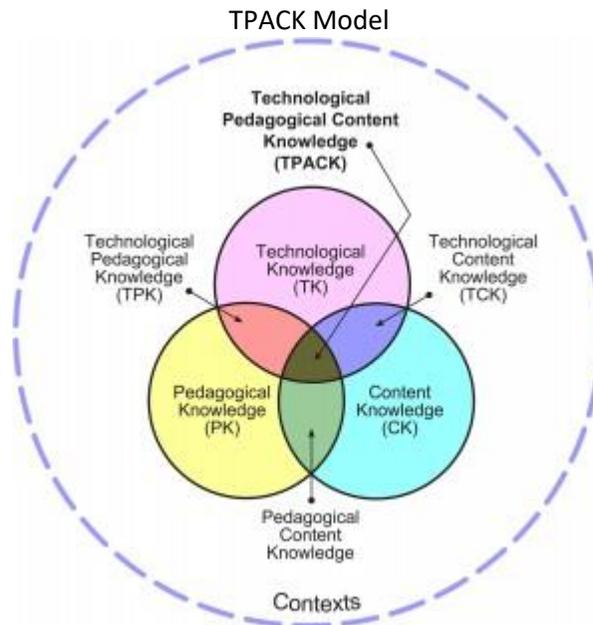
Selected central office and school-based leadership personnel will meet throughout the year to discuss technology needs and search for the best solutions to those needs. Business and community representatives will be consulted for assistance in this search as appropriate. These leadership personnel will review, evaluate, and determine hardware and content area software in the areas of productivity, communication, research, and problem-solving to be purchased to meet state and system instructional objectives. The Chief Technology Officer, Technology Director and Instructional Data Coordinator will meet regularly with the school-based DLSs to further discuss instructional technology needs and establish ways in which these needs may be met.

It is part of our vision that research-based common instructional strategies, driven by district identified power standards, and transformative technology promote collaborative implementation of real-world critical thinking resulting in increased student achievement. As such, RCPS has researched multiple frameworks and has adopted TPACK and Substitution, Augmentation, Modification, Redefinition (SAMR). Additionally, we have modified Jim Knight's *Big Four* to include technology within the coaching structure.

While we have a ratio of one DLS per school, they serve two schools, thus supporting the TPACK model and the Big Four (Positive Learning Environment, Content, Instructional Strategies and Technology). DLSs

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specialize in grades K-2 (iPads), grades 3-5 (Windows devices) or specific content areas in Middle/High School (Windows devices).



The job description and evaluation of the DLS are the Instructional Technology Standards for Coaches written by the International Society for Technology Education (ISTE) and adopted by the Georgia Professional Standards Commission for Instructional Technologists. In short, their primary goal is to model and coach instructional-technology best-practices for teachers in the classroom. The DLS spends most of their time in classrooms observing teachers, modeling for teachers, having coaching conversations and being an active participant in Professional Learning Communities (PLCs). Additionally, the DLS collaborates with stakeholders to develop a strong vision and action plan for their schools, content and/or grade-levels.

DLSs will guide teachers through planning with TPACK by helping to ensure teachers begin with the Content, plan for and implement Evidenced-Based Instructional Strategies and then appropriate technologies. This should result in increased student growth and achievement as a result of collaborative instructional planning.

To ensure the DLS can focus on teaching and learning, each school has at least one Instructional Technology Liaison (INTEL) who is responsible for inventory and maintenance/repair of both student/teacher devices and other school technology. The INTEL will become Dell Connect Certified so that warrantied parts can be ordered and replaced by on-site technicians. The System Support Specialists manage school clusters, play a critical role in monitoring, assisting and providing technical assistance to the INTELS, thereby serving not only as a “Level 2 Technician” but also as a mentor to teach the INTEL, thereby enabling the INTEL to have a greater degree of self-sufficiency.

Technology leadership recognizes the importance of retaining its world-class employees. We celebrate and reward teachers’ use of technology through our implementation of the Outstanding Technology

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Teacher of the Year (OTTY) program. In addition, leadership envisions additional processes to recognize/celebrate technology staff for outstanding performance.

Learners will become college and career ready by having used technology in real-world relevant ways throughout their K12 education. We envision RCPS students graduating with an advantage and consider that we are preparing students for worldwide collaborations using future technologies in the workforce, which do not yet exist in industries that are aligned to specialty schools such as healthcare, aerospace, and others. Learners will utilize technology to communicate with resources beyond the school walls, and they will use internet connectivity to conduct research and discover information necessary to solve problems related to academic endeavors.

Teachers' roles will change from traditional instructional delivery to facilitating learning, coaching, monitoring, while verifying student achievement of learning goals. Teachers will enable students in the use of technology tools to enhance learning by raising learner productivity and improving problem-solving skills.

One-to-one devices and a learning management system will be sustained by the system, and teachers will receive professional learning and coaching in the appropriate use of the devices and the learning management system in the classroom. This ubiquitous access will help engage students and encourage them to become life-long learners.

Teachers will also use technology to improve communication with parents and the community. Websites will provide current and continuous access to information from system and schools. Communication via electronic mail, itsLearning, Parent Portal, Bus Stop App, Twitter, Facebook and/or other social media outlets will continue to be used to provide information to parents and other interested parties in the community. The student information system's parent portal will be utilized to provide parents with continuous and up-to-date access to student performance and achievement information.

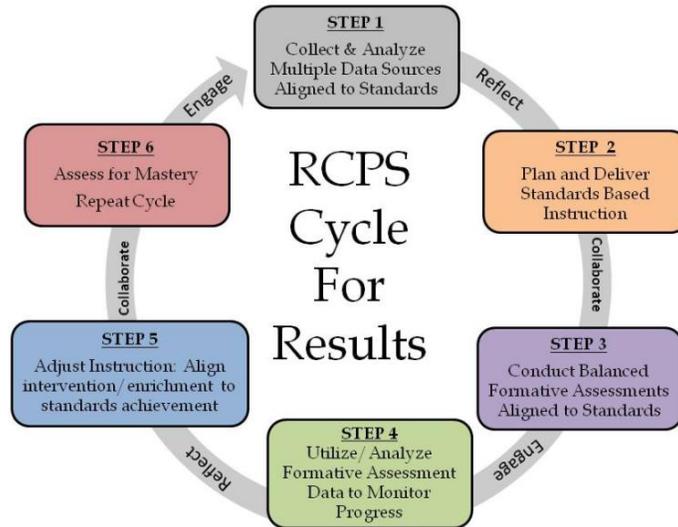
We strive to keep our administrative team up-to-date with the latest technological tools allowing them easy and proficient access to necessary information and contacts. We also provide internet-based access to the student information to all administrators and teachers from home and school. We have provided a web-based portal solution that provides data and information from a variety of sources in one central location. This enables all administrator's system-wide access to needed teacher and student information in a timely and efficient manner. Such a platform can assist in improving student achievement for all subgroups. We are incorporating an embedded data analytics and warehouse to provide a more robust reporting mechanism of state and local test scores. Administrators will use a phone messaging system to provide effective communication with parents and the community about school events and emergencies.

We currently provide parents access to their student's grades, attendance and class schedule via online platforms. The SIS/State Reporting Manager plays a critical role in our Student Information System, calculating FTE, providing guidance on data security, procedures and ensure that all State and Local reporting is completed timely and correctly. The Data Integration specialist synchs student data between the Student Information System and other platforms ensuring a seamless experience for teachers, students, parents and administrators. The Coordinator of Instructional Data provides guidance to school administrators, teachers and central office personnel on data analysis, school accountability

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measures and best-practices. Additionally, the Coordinator of Instructional Data builds dashboards to help place a focus on important measures and data elements.

Teachers and administrators will have ready and seamless access to all necessary data and communication tools to improve the learning environment throughout the district. With the implementation of a data warehouse (Tableau) and a robust assessment reporting tool (Schoolnet), teachers, administrators and district personnel will access real-time data via dashboard views with Key Performance Indicators (KPI). These tools directly impact our Cycle for Results process.



We provide access to communication and conferencing tools within the district currently using Microsoft Skype for Business. Each school is equipped with a Mondopad for video/voice conferencing. The Mondopad is one of the various tools that allows for robust conferencing capabilities permitting video/voice conferencing with other districts, vendors and classrooms outside of our district.

Each student in grades 3 through 12 is provided a laptop and appropriate software. We envision that RCPS issued devices will have internet connectivity both on and off campus. This connectivity will allow for anytime, anywhere learning. The system will continue to upgrade and improve the infrastructure and hardware needed to support this enhanced communication, including internet access. To support a safe learning environment, RCPS uses a robust filter system and supporting infrastructure. This infrastructure is managed, monitored and secured by the Network Manager and Network Specialist.

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Background and History

The RCPS technology plan is a sub-plan of and embedded in the system strategic plan and others such as AdvancED, school improvement, and yearly instructional goals. As elements of these plans are updated and modified, the technology plan is also revised in order to support and align with system plans.

In the beginning, the RCPS technology planning was organized into two separate plans, administrative and instructional functional areas, which matched the organizational structure, an Administrative Technology Department and an Instructional Technology Department. Beginning with our 2001-2006 plan, the administrative and instructional plans were merged to better facilitate implementation.

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II. Current Reality

Integration into Instruction

Over the past several years, there has been growth in both the utilization and quality of instructional technology in Rockdale County Schools. At each school, a full-time DLS provides daily support and ongoing personalized training to staff, ensuring effective integration and use of technology in the classroom. DLSs meet regularly with members of the curriculum department and professional development department to guarantee curriculum standards and instructional strategies are married with the technology that enhances the lessons. Additionally, the district continues to extend professional development opportunities for new and veteran teachers to extend and enhance the integration of technology into the classroom.

State-of-the-art equipment in every instructional classroom and the addition of one-to-one devices in every school in the county provides teachers the opportunity to do new and exciting personalized lessons with their students. Rockdale County Schools has a dedicated intranet and internet presence built upon Microsoft SharePoint Services. This allows for consistent connectivity and collaboration between schools and departments as well as the community. All teachers have access to the district's learning management system that provides up-to-date instructional information to students and parents. Our schools' DLSs have presented at state and national conferences, sharing innovative technology ideas and lessons with teachers from across the state and country.

Technology Infrastructure:

- All students in 3rd-12th grade have regular access to an appropriate device. Unless an IEP Team determines otherwise, the student is issued a Windows touchscreen laptop for the duration of the school year. If an IEP determines, an iPad may be made available.
- In grades K-2nd, each core classroom has a set of 11 iPads.
- Teachers have online access to an electronic grade book program which in turn allows parents to have online access to student grades, attendance, and class schedules.
- Teachers and students have access to the district's learning management system and student assessment system.
- Each school has a fax machine, telephone system with classroom telephones, voicemail capabilities, and an automated parent-calling system.
- Wi-Fi coverage for all schools supports a 3:1 device per student capability.
- Special Education teachers have online access to an electronic Individual Education Plan tool.
- Every computer has access to the local and wide area network.
- Every computer has internet access.
- All desktops, laptops and iPads are managed by a mobile device manager.
- All Office 365 email messages are scanned for spam, phishing attacks, malware, and unsafe URL links through Microsoft's Advanced Threat Protection.
- Email, OneDrive for Business, and SharePoint files are protected with Microsoft's Data Loss Prevention.
- Each administrative office has a networked modern computer.
- There is state-of-the-art equipment in every instructional classroom in every school in the county.
- Each school has a Mondopad for video/voice conferencing.
- Each school has a 10GB network within the school (Local Area Network, LAN).

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- Each school has a 1GB to 10GB expandable connection to the district office (Wide Area Network, WAN).

Barriers:

- Funding deficits hindered ability to maintain a scheduled technology replacement plan
- Funding deficits have reduced technology staff in each school
- Insufficient technology staff at the district office
- Staff training time, specifically for school and central office leaders
- Equity of access to internet access at home
- Training with high-teacher/leadership turnover and changing technologies
- Technology support staffing to match system needs
- Keeping up with emerging technology
- Technology-related security threats

Sub-group student needs – academic

Since 2000, RCPS has experienced rapid growth and increasing demographic changes. We recognize that these changes will affect all aspects of the educational system and we are working diligently to identify the needs of our changing population.

Using system data on school demographics and state testing results (Georgia Milestones), including but not limited to the College and Career Ready Performance Index (CCRPI), formative assessments and many other pieces of information, we have determined sub-groups that need our immediate focus.

These sub-groups include, but are not limited to the following:

- **English Language Learners (ELL)**– This is a growing population in our system and we need to be able to address the specific and unique needs of this group, including computer access and ability to use the computer. We have implemented a technology-based ELL program based on Rosetta Stone and we continue to research software specifically designed to meet the unique needs of this group to increase performance in reading, math and graduation rate.
- **Special education population** – This group is monitored closely by the system’s special education department to ensure their needs are being met with equitable access to technology in the schools. We have heavily invested in assistive technology at all levels and have partnered with assistive technology organizations to help develop new products based on student needs.

Parental Involvement

Any parent with internet access can receive system and school information via web pages and access student information via the online parent portal. Many of the schools have computer access available to parents before and after school for those who do not have alternative access. In addition to the Public Library, a variety of public areas are available for wireless access. This will help close the achievement gap and digital divide among the higher and lower socioeconomic status groups in our student population.

The Technology Division recognizes RCPS’s plan to offer community centers. We will provide network infrastructure in the community centers to ensure that RCPS students and parents can access online resources.

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RCPS is evaluating options for shifting to a digital instructional content delivery model. Communication with textbook companies reveals that increasingly diverse and numerous resources will be available. As a result of implementing one-to-one laptops, digital resources for students has become a continued priority. System personnel constantly have to define/review content types available from adopted curriculum resources and district subscriptions.

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1. *Instructional Goals*

Instructional goals focus on building a technology-rich learning community of teachers, students, and others.

Goal 1:

Empower all students to use technology tools to enhance and transform learning by improving communication, collaboration, research, and problem-solving skills.

Benchmarks:

- Instructional staff will continue to familiarize students and create lessons with the - International Society for Technology in Education Standards for Students (ISTE-S).
- Students will research and incorporate technology for investigative projects.
 - Project/Problem-based learning
 - Collaboration with others outside the school system
- Increase the technology proficiency of all students in grades K-12, including but not limited to information literacy, the use of appropriate digital resources and the implementation of the county's one-to-one initiative. (Ongoing)
- Expand the use of the district's Learning Management System to enable students to create digital writing portfolios. (Strategic Plan 2.A.2)
- Teach Microsoft Office in middle school with certifications obtained by the end of 8th grade. (Strategic Plan 2.A.8)
- All middle school students will earn credentials and/or certifications (Microsoft Office). (Strategic Plan 2.A.5)
- We will offer MIE Certification for teachers and staff.
- Train teachers on facilitating student use of technology to create new content and to show content mastery, such as, through the use of podcasts and video blogs. Build connections to the Assessment As Learning (AaL) model. (Strategic Plan 2.A.8)
 - A list of best-practices and tools will be developed and provided.
- Expand student access to coding, engineering, and other high demand technology skills. (Strategic Plan 2.A.8)
- Create student digital portfolios to demonstrate mastery of grade-level technology skills in grades 5, 8, and 12. (Strategic Plan 2.A.8)
 - Determine what mastery is at grades 5, 8, and 12.
- Develop on-demand learning videos to support courses and to provide students with the ability to guide their own learning (use a YouTube model that also suggests videos to watch). (Strategic Plan 2.B.2)
 - PL coaching will include how-to, and best-practices related to on-demand video learning.
- Use technology to provide virtual opportunities to participate in activities and events (digital workshops, Skype, Facebook Live, webinars, etc.). (Strategic Plan 5.A.2)
- Increase in classroom observations demonstrating student use of technology as measured by ISTE-S, a crosswalk to the AdvancED eleot and/or Big Four

**Evaluation Plan/
Data Collection:**

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- Increase in reported best-practices based on the BrightBytes survey
- Increase the number of students earning a Microsoft Office Certification, based on CTAE enrollments (Strategic Plan 2.A.8 and 2.A.5)
- Increase the number of teachers/employees earning MIE Certification
- Documented professional learning on the use of technology to create new content and to show content mastery, such as, through the use of podcasts and video blogs (Strategic Plan 2.A.8)
- Increased course offerings in coding and engineering (Strategic Plan 2.A.8)
- Student portfolios demonstrating mastery of grade-level technology skills in grades 5, 8, and 12 (Strategic Plan 2.A.8)
- A bank of videos to support courses providing students with the ability to guide their own learning (Strategic Plan 2.B.2)
- Increase in the opportunities for virtual workshops (Strategic Plan 5.A.2)
- Informal and formal teacher observation to evaluate effective technology integration
- Work collaboratively with curriculum to embed effective technology integration evaluations with formal and information administrative observations
- Increase in number and quality of digital resources available to students
- Outstanding Technology of the Year artifacts exemplify the vision within this plan and the RCPS Strategic Plan
- Parent and student surveys are administered through current assessment practices for feedback on usefulness of various digital resources
- Records of use of online conferencing tools for live activities and events; feedback on usefulness of tools gathered through survey data

Responsibilities: Curriculum and Instruction Department, CTAE Department, Office of Professional Learning, Digital Learning Specialists, Coordinator of Instructional Data, Technology Director, Chief Technology Officer, Classroom Teachers, Media Specialists, Technology Division, Professional Learning Office

Goal 2: Use technology to improve communication with parents and the community

- Benchmarks:**
- Continue to use the Infinite Campus Parent Portal as a key communication tool between school and parents. (Ongoing)
 - Research, develop, and provide consistent recommendations for using Infinite Campus as a communication tool.
 - Provide training for parents on how to use and access the Infinite Campus Portal.
 - Maintain a current and informative school system web site. (Ongoing)
 - Maintain current and informative school web sites.

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- Develop web publishing guidelines for system and school sites. (Ongoing)
- Ensure consistent teacher grade input into digital platforms. (Strategic Plan 5.A.2)
- Daily attendance is maintained electronically in the Student Information System. Grades are to be periodically updated to show current student progress.

***Evaluation Plan/
Data Collection:***

- Record use of student information system by teachers, parents and students (Strategic Plan 5.A.2)
- School system, school, and class web pages are reviewed quarterly for current information, instructional usefulness, and accessibility
- Parent and student surveys are administered through current assessment practices for feedback on usefulness of various digital resources
- Review of amount and effectiveness of electronic communication with parents and public throughout system
- Records of training for parents on the use and access to the Infinite Campus Portal

Responsibilities:

Division of Strategy and Innovation, Coordinator of Instructional Data, Technology Director, Chief Technology Officer, Classroom Teachers, Media Specialists, Technology Division, Webmaster.

Goal 3:

Review, evaluate, and purchase digital resources that support the Vision and Strategic Plan of Rockdale County Public Schools.

Benchmarks:

- Digital resources already in place are reviewed, updated and upgraded as needed. (Ongoing)
- Use of textbook purchasing monies for electronic books and similar software or web-access materials is preferable. (Ongoing)
- Digital resources appropriate for special education needs, including assistive technology is purchased. (Ongoing)
- Maintain updated Library/Asset Management System. (Ongoing)
- Expand the effective use of the learning management system to support the one-to-one initiative. (Ongoing)
- When considering a purchase, the focus should be on productivity, communication, research, creativity and problem-solving.
- Develop available digital resources lists by grade level, subject area, etc. (Ongoing)
- If determined, investigate, research, and implement a curriculum management solution.

***Evaluation Plan/
Data Collection:***

- Current list of County approved instructional digital resources
- Purchase orders/RFPs

Responsibilities:

Curriculum and Instruction Department, Department of Student Support Services, Coordinator of Instructional Data, Technology Director, Chief

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Technology Officer, LTCs, Digital Learning Specialists, Media Specialists,
Technology Division, Purchasing Department

Goal 4:

Review, evaluate, and purchase emerging technologies to meet instructional objectives

Benchmarks:

- Purchase equipment and incorporate virtual reality into teaching and learning. (Strategic Plan 2.A.8)
 - Review available virtual reality educational resources and their alignment to content areas as a criterion for acquisition.
 - If VR educational resources are available, conduct a pilot to determine effectiveness.
- Provide internet access throughout the district (example: mobile hotspots, wi-fi on buses, etc.). (Strategic Plan 2.B.2)
- Develop and implement a detailed plan to replace/upgrade projection systems that include 3D, touch panels, VR, and other emerging technologies as they become available to support “classrooms of the future.” (Strategic Plan 3.B.1)
- Research and implement the use of audio and video-enhanced classrooms. (Strategic Plan 3.B.1)
- Research and pilot emerging technologies to enhance/transform student learning.

Evaluation Plan/ Data Collection:

- County technology director’s records and reports of hardware reviews, evaluation and recommended purchases are reviewed
- Meeting minutes
- Results from pilots of selected classes with best resources (Strategic Plan 2.A.8 and 3.B.1)
- Internet availability to stakeholders using RCPS devices off school grounds (Strategic Plan 2.B.2)

Responsibilities:

Digital Learning Specialists, Technology Division, Technology Director, Chief Technology Officer, Coordinator of Instructional Data, Network Manager, System Support Specialists

Goal 5:

Increase number of online high school courses available to students

Benchmarks:

- Increase online course selections available for a variety of academic needs. (Ongoing)
- Use online platforms to supplement and support traditional academic classrooms at middle and high school levels. (Ongoing)
- Professional learning in the development and implementation of online courses is provided and required for teachers who develop or teach online courses. (Ongoing)
- Add an electronic support system for current district-wide face-to-face classes, as well as offering online tutorial sessions in non-traditional formats. (Ongoing)
- Utilize the anytime and anyplace nature of web-based communication and collaboration. (Ongoing)

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Evaluation Plan/ Data Collection:	<ul style="list-style-type: none"> • Work with GaDOE to provide students with course credit for the completion of Massive Open Online Courses (MOOCs). (Strategic Plan 2.C.1) • Expand online course catalog. (Strategic Plan 2.C.1) • Training materials for online course development reviewed and evaluated for effectiveness • Created courses are reviewed and evaluated for content and academic rigor • Online course schedules and enrollment records are reviewed for participation • Embedded and submitted information, including but not limited to student activity in platform, student performance on assignments, and student achievement, evaluated for quality and quantity of student learning and use • Students who have participated in online courses complete surveys on their learning experience and results are used to improve courses and instructional procedures • Increase in course catalog offerings (Strategic Plan 2.C.1)
Responsibilities:	Curriculum and Instruction Department, Rockdale Virtual Campus Director, Coordinator of Instructional Data, Technology Director, Professional Learning Department

Goal 6:	Enhance and improve the use of the learning management system for students and teachers
Benchmarks:	<ul style="list-style-type: none"> • Increase the use of the district’s learning management system for delivering online content and building student technology skills. (Strategic Plan 2.A.8) • Use the learning management system to promote creation, consumption, curation and connections. • Use web-based instructional tools and platforms for student-centered/personalized learning. <ul style="list-style-type: none"> ○ Examples include: online projects, self-graded quizzes and tests, blogs, wikis, podcasts, social networking sites, threaded discussions, etc. • Research and implement best-practices and resources for blended-learning. <ul style="list-style-type: none"> ○ Examples: station-rotation, individual rotation, flipped classroom
Evaluation Plan/ Data Collection:	<ul style="list-style-type: none"> • Training materials and delivery methods are reviewed and evaluated for effectiveness • Learning management system logs and analytics (Strategic Plan 2.A.8) • Classroom observation data • Documentation of related professional learning
Responsibilities:	Curriculum and Instruction Department, Technology Director, Coordinator of Instructional Data, Technology Division, Digital Learning Specialists, Teachers, Media Specialists, Professional Learning Department

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Goal 7:

Provide a community of highly-qualified instructional technology coaches focused on coaching and professional learning for implementing evidence-based best practices.

Benchmarks:

- Use technology, such as SWIVL, to provide increased opportunities and feedback. (Strategic Plan 2.A.7)
 - Digital Learning Specialists and other coaches will use video technologies to help teachers reflect on their practice and to provide feedback.
- Provide opportunities for modeling of best-practices through scheduling of DLS-taught lessons. (Strategic Plan 2.A.7)
- Implement a cross-departmental coaching model
- Provide ongoing professional learning for teachers to support instructional models to promote student mastery through a la carte learning (i.e.: use of technology, small groups, mini-lessons). (Strategic Plan 2.C.1)
- Evaluate the support staff needed to ensure technology coaching is effectively impacting and changing instruction. (Strategic Plan 3.B.1)
- Provide coaching and modeling of evidenced-based teaching-practices as it relates to personalized and blended-learning models.
- Develop and implement a DLS induction program, for onboarding new induction-phase digital learning specialists.
- Embed digital citizenship in lessons and coaching resulting in annual renewal of school/system Common Sense certification.
- Provide Microsoft Innovator Educator (MIE) training and certifications to instructional technology coaches.
- Research additional professional learning opportunities and certifications for Digital Learning Specialists (ex: ISTE Certification).
- Strengthen DLS understanding of and ability to perform all elements of the ISTE-Coaching standards.

**Evaluation Plan/
Data Collection:**

- Analytics on using video as a coaching and/or feedback tool for teachers (Strategic Plan 2.A.7)
- DLS calendars and coaching forms (Strategic Plan 2.A.7)
- Minutes of cross-departmental meetings and coaching notes showing collaboration between departments
- Classroom observations
- DLS induction and retention plan
- Common Sense Education's digital citizenship certifications
- Logs demonstrating attendance and certifications for Microsoft Innovator Educator (MIE)
- Professional learning for Digital Learning Specialists related to the ISTE-Coaching Standards and additional PL opportunities
- Document training opportunities and track participation

Responsibilities:

Curriculum and Instruction Department, Coordinator of Instructional Data, Technology Director, Chief Technology Officer, Technology Division, Digital Learning Specialists, Media Specialists, Professional Learning Department

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2. Administrative Goals

Using technology to improve administrative processes has proven to be a crucial part of school system operations. Administrative processes include finance, student data management, employee data management, purchasing, transportation, School nutrition, communication and networking.

Goal 1:	Enhance automated administrative processes
Benchmarks:	<ul style="list-style-type: none"> • Implement additional internal possibilities for electronic commerce (Online Cafeteria Payment, PayPal, and Parent Portal payments in Infinite Campus are currently being utilized). (Ongoing) • Continue to research and implement ways to streamline entry of student data to improve consistency and accuracy of data (Centralized registration and online forms are currently being utilized). (Ongoing) • Improve management of employee data and onboarding (i.e. employee self-serve, application process, etc.). (Ongoing)
Evaluation Plan/ Data Collection:	<ul style="list-style-type: none"> • Document the increase in E-Commerce opportunities being used by the school system • Document student information system modifications and improvements for data entry and reporting
Responsibilities:	Chief Technology Officer, Chief Financial Officer, Technology Director, Director of Human Resources
Goal 3:	Improve communication systems
Benchmarks:	<ul style="list-style-type: none"> • Continue to implement electronic faxing system-wide. (Ongoing) • Continue to increase internet web applications to enhance communication with parents and community. (Ongoing) • Increase Intranet applications to enhance communication with employees. (Ongoing) • Provide access to student information system by web apps compatible with most mobile devices. (Ongoing) • Continue to implement automated calling system as an additional communication tool. (Ongoing) • Provide and communicate multiple ways to conduct teacher conferences using technology (phone, teleconferencing, FaceTime, Skype for Business). (Strategic Plan 5.A.2) • Increase the use of diverse modes of professional learning delivery to include video, electronic means, web conferencing, face-to-face, tours and shadowing. (Strategic Plan 1.C.1) • Continue to maintain and support a district-wide online helpdesk system for employees to submit technology requests. The helpdesk system tracks and monitors all technology issues. (Ongoing)
Evaluation Plan/ Data Collection:	<ul style="list-style-type: none"> • Document web-based enhancements for communication • Survey staff and community • Analytics showing the use of online helpdesk

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Responsibilities: Technology Division, Strategy and Innovation, Teaching and Learning

Goal 4: Review and update district policies to support administrative goals.

- Benchmarks:**
- Research and develop guidelines and policies for social network and collaboration (i.e. Facebook, Twitter, etc.) (Ongoing)
 - Review and update policies for surplus materials, resources and equipment. (Ongoing)
 - Review and update media cataloging policies in conjunction with library management system. (Ongoing)
 - Review and update job descriptions of all technology staff to reflect transformation of responsibilities with the development and implementation of technologies. (Ongoing)
 - Review and update job descriptions of Media Specialist to reflect implementation of modified responsibilities in conjunction with adoption of Library, Textbook and/or Asset manager software. (Ongoing)
 - Create an approval process for purchasing software that needs integration with other systems. Ensure all schools and departments follow this protocol. (Strategic Plan 3.B.1)
 - Review and update Learning Reimaged documentation (i.e. 1-to-1 student handbook, website, laptop checkout form, lost/damaged forms, etc.)
 - Reduce printing/copying in schools and offices by using technologies.

**Evaluation Plan/
Data Collection:**

- Provide links to updated job descriptions for current hires and on vacancy notices
- Updated guidelines and policies (Strategic Plan 3.B.1)
- Analytics of printing/copying

Responsibilities: Technology Division, Digital Learning Specialist, Media Specialists, Business Services, Human Resources Department, Curriculum and Instruction, Learning Support

Goal 5: Job-specific training and communication practices

- Benchmarks:**
- Provide training on all Office 365 products (i.e. Office online, OneNote, Sway, etc.). (Ongoing)
 - Provide training as needed on various digital resources as they are updated, or as new applications are acquired. (Ongoing)
 - Training on student scheduling and report ordering for the student information system's main users. (Continued)
 - Train administrators on the features and reports available in:
 - Student information system
 - Assessment system
 - Learning Management system
 - Data Warehouse system
 - Statewide Longitudinal Data System (SLDS)
 - Conduct student information system refresher course for health personnel and discipline personnel. (Ongoing)

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- Improve awareness of existing technology and training that is available to employees. (Ongoing)
- Continue ongoing training on the RCPS Cycle for Results for a systemic process to analyze data and improve instruction (use technology resources to monitor the cycle). (Strategic Plan 2.A.7)

***Evaluation Plan/
Data Collection:***

- Document technology training plans based on positions (Strategic Plan 2.A.7)
- Record number of training sessions held

Responsibilities:

Chief Technology Officer, Chief Financial Officer, Technology Division, Professional Learning Department, Student Information System Users, Digital Learning Specialist, Instructional Coaches, Curriculum and Instruction, Business Services, Department of Human Resources.

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3. Data Collection Goals

As accountability continues to be a priority to our schools and the district, we must make better data-driven decisions as teachers and administrators. To do that, we need to have the data collected presented in usable, easy to understand formats.

Goal 1:	Provide technology tools to assist with and support the Cycle for Results process.
Benchmarks:	<ul style="list-style-type: none">• Continue the use of the state provided longitudinal data tool (SLDS). (Ongoing)• Determine currently available data points and regularly requested data reports by School and District. (Ongoing)• Continue to provide dashboard views for administrators, teacher and parents using a one-stop interface provided via Schoolnet and Infinite Campus. (Ongoing)• Support the formative monitoring of student achievement by supporting a robust system that helps teachers formatively assess their students in a variety of ways including technology-enhanced items.
Evaluation Plan/ Data Collection:	<ul style="list-style-type: none">• Analytics showing the availability and use of the state longitudinal data tool (SLDS)• Analytics showing the availability and use of Schoolnet and data dashboards within Infinite Campus• Creation and development of PLC-created formative assessments administered to students, including the use of technology-enhanced items
Responsibilities:	Technology Director, SIS Manager, Data Integration Specialist, Coordinator of Instructional Data, Chief Technology Officer, Department of Research and Accountability, Digital Learning Specialists, Administrators, Professional Learning Department
Goal 2:	Continue to use digital resources to facilitate student data collection and analysis in special education.
Benchmarks:	<ul style="list-style-type: none">• Generate electronic Individualized Education Plans.• Collected data to be available in the data warehouse for teachers and administrators on an as needed basis.• Expand the analytics available on MTSS, including RTI.
Evaluation Plan/ Data Collection:	<ul style="list-style-type: none">• Analytics showing the availability and use of electronic Individualized Education Plans (IEPs)• Analytics showing the availability and use of data related to MTSS, including RTI
Responsibilities:	Teaching and Learning, Technology Director, SIS Manager, Data Integration Specialist, Coordinator of Instructional Data, Technology

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Division, Curriculum Department, Learning Support Department,
Department of Research and Accountability

Goal 3: Provide ongoing review, evaluation and recommendations for improving current student information system and the transfer of data.

- Benchmarks:**
- Maintain a Student Information System (SIS) review committee that will collect data from SIS users and develop prioritized recommendations for SIS improvements.
 - Continue quarterly meetings between the SIS representative and the SIS review committee as a means of opening dialogue that can result in meaningful improvement in the SIS.
 - Inventory and review all existing technology tools for the interoperability and the exchange of data. Integrate systems where appropriate (i.e.: grades flow from itsLearning to Infinite Campus). (Strategic Plan 3.B.1)
 - Evaluate the support staff needed to ensure technology devices and infrastructure are operating at maximum capacity. (Strategic Plan 3.B.1)

- Evaluation Plan/
Data Collection:**
- Document members of SIS users' group
 - Record meetings with complete minutes
 - Registration/enrollment process includes the creation of an Infinite Campus parent portal account (Strategic Plan 5.A.2)
 - Integration of data systems where appropriate and possible (Strategic Plan 3.B.1)

Responsibilities: Technology Division, Curriculum Department, Learning Support Department, Data Specialists

Goal 4: Provide digital resources to facilitate student data collection and analysis to increase student achievement and teacher productivity.

- Benchmarks:**
- Configure data points for Schoolnet and Tableau to build dashboard view of Key Performance Indicators for teachers and administrators.
 - Evaluate digital resources to increase teacher productivity, improve teacher collaboration, and facilitate student data collection.
 - Create a dashboard to monitor student progress towards college and career readiness. (Strategic Plan 2.B.2)
 - Improve accuracy, review, and processing of FTE data to ensure district receives maximum FTE funding. (Strategic Plan 3.A.4)
 - Regular use of and monitoring of ETCH and FTE processes.

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- Improve review and processing of Student Class to ensure accuracy of reporting for system planning, CCRPI and analytics.
 - Improve review and processing of Student Record to ensure accuracy of CCRPI and analytics.
 - Implement a data warehouse and analytics tool. (Strategic Plan 3.B.1)
- Evaluation Plan/
Data Collection:**
- Document system(s) selected for online testing and instructional management
 - Document amount of software system use
 - Analytics showing the availability and use of data warehouse and analytics tool (Strategic Plan 3.B.1 and 2.B.2)
 - Written processes and check-points for the accuracy, review, and processing of State Reporting (FTE, Student Class and Student Record) data (Strategic Plan 3.A.4)
- Responsibilities:** Teaching and Learning, Chief Technology Officer, Technology Director, Coordinator of Instructional Data, Data Specialists, Technology Division, Curriculum Department, Learning Support Department, Department of Research and Accountability, Professional Learning Department

Goal 5: Implement data warehousing solution for student, financial, and personnel information

- Benchmarks:**
- Increase data analysis capabilities for administrative applications. (Ongoing)
 - Continue use of District Reporting System to report key performance indicators. (Ongoing)
 - Eliminate the need for staff to re-enter data that should be readily available. (Ongoing)
 - Continue to provide a seamless access to pertinent data via dashboard interface. (Ongoing)
 - Integrate outside systems into the data warehouse for in-depth data analysis and program evaluation (i.e. human resource information, Brightbytes survey, etc.). (Ongoing)

- Evaluation Plan/
Data Collection:**
- Continuously document stakeholders' conversations regarding the improvement of data analysis offerings available to teachers and administrators

Responsibilities: Chief Technology Officer, Technology Director, SIS Manager, Data Integration Specialist, Coordinator of Instructional Data

Goal 6: Provide professional learning to teachers, administrators, and others on collecting, understanding and using data following the Cycle for Results process.

- Benchmarks:**
- Provide ongoing professional learning on all data views to help administrators and teachers make better data-based decisions. (Ongoing)
 - Provide on-going Professional Learning for all SIS users.
 - Continue training in the use of assessment analysis software such as Schoolnet, Tableau and SLDS. (Ongoing)

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- Provide ongoing professional learning in the development and scheduling of Common Formative Assessments, including the use of Technology-Enhanced items.
- Provide ongoing professional learning on using the Cycle for Results to improve teaching and learning.
- Provide professional learning in data best-practices and responsible data use.
- Record professional learning sessions and evaluations of sessions offered

***Evaluation Plan/
Data Collection:***

Responsibilities:

Chief Technology Officer, Technology Director, Coordinator of Instructional Data, SIS Manager, Data Integration Specialist, Digital Learning Specialists

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4. Infrastructure Goals

The goals and strategies of the other sections were reviewed to ensure that the current hardware and software tools available or planned to be available were sufficient. A review was also conducted on the wide and local area networks to determine areas that needed improving or changing. A review of the previous technology plan's infrastructure goals was also conducted.

Goal 1:	Host network resources for system use.
Benchmarks:	<ul style="list-style-type: none">• Maintain database servers for instructional, business, security processes. (Ongoing)<ul style="list-style-type: none">○ Student and staff ID cards○ Professional learning○ Data warehouse○ Transportation○ School nutrition○ Access control○ Security cameras• Maintain an email capability that is always available and research next version of software to provide unified messaging capability. (Ongoing)• Maintain filtered internet access with load balancing and redundancy. (Ongoing)• Maintain telephone system for the district, including auto attendant and voice mail. (Ongoing)• Maintain and improve virus protection (server, desktop/laptop, and gateway). (Ongoing)• Maintain and monitor network and computers. (Ongoing)• Maintain technology-rich classrooms. (Ongoing)
Evaluation Plan/ Data Collection:	<ul style="list-style-type: none">• Review status with DLS and INTELS at monthly meetings• Review status during weekly network meetings• Evaluate event viewers and logs of servers on a weekly basis to determine performance• Review progress in relation to Strategic Plan
Responsibilities:	Technology Division
Goal 2:	Maintain infrastructure to support instructional, administrative, school safety, and professional learning goals
Benchmarks:	<ul style="list-style-type: none">• Continue to provide wide area (WAN) and local area (LAN) networks. (Ongoing)• Provide internet resources and filter in accordance with state and federal guidelines. (Ongoing)• Maintain printing capability with quality laser printers available at a minimum of one per hallway. (Ongoing)• Continue to increase the bandwidth of wide area network (WAN) and local area networks (LAN) based on need to prevent latency problems, improve cloud application performance and lost instructional time. (Ongoing)

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- Continue to increase internet bandwidth from 100Mbps per school to 1Gbps per school to accommodate administrative and instructional needs. (Ongoing)
- Sustain internet access with a redundant load balanced circuit. (Ongoing)
- Maintain wireless access throughout the district with a modern enterprise-grade wireless LAN solution to support administrative and instructional needs. (Ongoing)
- Research and purchase a network monitoring system to evaluate real-time network performance. (Ongoing)
- Provide and maintain servers for centralized control of security and classroom cameras for School Safety and Teaching and Learning departments. (Ongoing)

**Evaluation Plan/
Data Collection:**

- Use tools to monitor Internet bandwidth bandwidth use
- Use network monitoring tool for real-time performance
- Regularly monitor internet filter and network performance

Responsibilities:

Technology Division, School Safety, Teaching and Learning

Goal 3:

Provide and maintain modern equipment that supports the district's strategic plan and one-to-one initiative

Benchmarks:

- Per the district's Strategic Plan, provide digital devices in a one-to-one environment. (Ongoing)
- Replace desktops on a 5-year cycle. (Ongoing)
- Replace laptops on a 3-year cycle. (Ongoing)
- Replace student and teacher iPads on a 5-year cycle. (Ongoing)
- Replace classroom projectors with interactive flat panels. (Ongoing)
- Replace all other technology to maintain modern equipment. (Ongoing)
- Maintain an accurate hardware inventory with an asset management system. (Ongoing)
- Continue to research and integrate forthcoming software defining technologies to eliminate infrastructure hardware. (Ongoing)

**Evaluation Plan/
Data Collection:**

- Monitor student population and computer ratio at each FTE submission
- Maintain inventory of all technology hardware

Responsibilities:

Technology Division

Goal 4:

Develop virtual and cloud computing options to increase efficiency and enhance the districts data center and overall network

Benchmarks:

- Continue to implement virtual servers as applicable. (Ongoing)
- Increase use of virtual servers to provide more effective server structure. (Ongoing)

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- Investigate hosting servers in the cloud for data center redundancy as well as cost savings. (Ongoing)
- Evaluation Plan/
Data Collection:**
- Update network infrastructure schematic as virtual servers are added
 - Collect student usage statistics from schools
- Responsibilities:** Technology Division

Goal 5: Provide technical training for technology staff

- Benchmarks:**
- Attend training to maintain proficiency on equipment and digital resources. (Ongoing)
 - Attend conferences to learn best practices and share knowledge. (Ongoing)
 - Provide technology support and training for school and district level technicians. (Ongoing)
- Evaluation Plan/
Data Collection:**
- Monitor success rate of certification testing
 - Conference attendance logs
 - Professional learning logs
- Responsibilities:** Technology Division

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5. Security Goals

As data breaches and cyber-attacks become ever increasing, protecting Personally identifiable information (PII) for students and employees is a top priority for the district, as well as safeguarding our network and digital tools. To accomplish this goal, policies and procedures are necessary to protect the district's technology infrastructure and sensitive personal information. As a result, reviews, audits, and training will routinely be conducted by the Technology Division and other departments to monitor and mitigate as much risk as possible.

Goal 1:	Improve data protection by safeguarding important information from corruption, compromise or loss
Benchmarks:	<ul style="list-style-type: none">• Implement and maintain Microsoft's Data Loss Prevention and Azure Information Protection to classify and protect PII in email, SharePoint, and OneDrive for Business. (Ongoing)• Use cloud storage to securely store and backup work-related files (SharePoint and OneDrive for Business). (Ongoing)• Update disaster recovery plan in correlation with the incident response plan.• Apply Microsoft's Advanced Threat Protection, spam filter, and email rules.• Encrypt all staff laptops to protect data. (Ongoing)• Regularly conduct internal and external audits for data security. (Ongoing)
Evaluation Plan/ Data Collection:	<ul style="list-style-type: none">• Monitor security reports in Office 365's administrative console• Annually review disaster recovery plan
Responsibilities:	Technology Division
Goal 2:	Improve the security and redundancy of the network resources
Benchmarks:	<ul style="list-style-type: none">• Continue server backup, firewall protection, VPN service, and virus protection. (Ongoing)• Upgrade desktop/laptop computers with latest release of Microsoft operating system annually along with monthly updates and patches. (Ongoing)• Upgrade servers with latest release of Microsoft operating system annually along with monthly updates and patches. (Ongoing)• Monitor network for viruses. (Ongoing)• Research and install intrusion protection services (IPS).• Isolating guests and students from the internal network.• Research and implement cloud-based backups.• Research and implement redundancy by adding Active Directory and Federated Services to the Azure Cloud.• Conduct regular internal and external security audits.• Monitor and track laptops with device tracking software (Absolute).
Evaluation Plan/ Data Collection:	<ul style="list-style-type: none">• Monitor network for virus and intrusion alerts• Install Active Directory and Federated services servers in the cloud• Monitor firewall and VPN logs routinely

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Responsibilities: Technology Division

Goal 3: Review and update district policies to support security goals

Benchmarks:

- Research and update the management policies for sending and storing PII for students and employees. (Ongoing)
- Review and update the district’s policies on password length and duration. (Ongoing)
- Research and create procedures for reporting and handling security issues by end users (malware, virus, phishing emails, etc.). (Ongoing)
- Review and update directory information policy. (Ongoing)
- Review and update student and employee acceptable use policy. (Ongoing)
- Research and develop a robust and all-encompassing incident response plan. (Ongoing)
- Research and update the district’s disaster recovery plan. (Ongoing)
- Involve all departments handling PII in the creation and review policies. (Ongoing)
- Research cloud offerings to provide redundancy and disaster recovery.
- Provide links to updated policies regularly

**Evaluation Plan/
Data Collection:**

Responsibilities: Technology Division, Department of Human Resources, Teaching and Learning, Learning Support, Business Services, Safe Schools and Student Affairs

Goal 4: Plan and implement professional learning on data privacy and network security

Benchmarks:

- Train staff on district procedures for securely storing and sending documents with PII in email, SharePoint, and OneDrive for Business.
- Continually train employees on an awareness of SPAM, phishing and spoofing emails and procedures when these types of emails are received.
- Design and deliver professional learning to administrators, teachers, and students on data privacy and network security. (Ongoing)
- Conduct annual training and simulations on the district’s incident response plan. (Ongoing)
- Continually deliver security training for the members of the Technology Division concerning data privacy and network security.
- Develop mechanism to replicate spoof emails for training.
- Review of professional learning records
- Document school-based technology training opportunities for personnel
- Document technology division trainings

**Evaluation Plan/
Data Collection:**

Responsibilities: Technology Division

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III. Communication and Marketing

The 2018-2021 Rockdale County Public Schools three-year technology plan will be posted on the system website. Additionally, the plan will be presented at a Board of Education meeting, a schoolyear startup meeting, a Digital Learning Specialist meeting, and a media specialist meeting during the 2018-2019 school year. Electronic copies of the technology plan will be provided to each school instructional team.

The system will make a continuous effort to communicate the importance technology plays in the instructional and administrative processes of the school system. Possibilities to increase awareness of the effective uses of technology in our system include, but are not limited to, participating in a yearly Technology Showcase, providing multiple opportunities for students to share their achievements in video and technology, creating technology partnerships with the business community, promoting our system technology initiatives at employment and recruitment fairs, and presenting at state and national conferences about the effective use of technology in our system.

Intra-system collaboration will include programs for grading, test administration and data analysis, web-based file sharing and communication, and a phone-based parent notification system. Technology updates will be disseminated on the system's website.

An effort will be made to contact local media representatives to increase newspaper and other coverage on our innovative and creative uses of technology in the classrooms to further make the public aware of innovations occurring in the system. These combined efforts will be recorded as documentation and support for future funding requests from the school board and to help acquire public support for alternative funding sources such as SPLOST funds.

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IV. Professional Learning

Professional Development is addressed as a goal within each of the components of the System-Level Technology Plan. This creates a stronger alignment between this plan, professional learning, AdvancED, and the Strategic Plan.

Professional Learning Strategies

The majority of professional learning is handled through school-based redelivery of school system initiatives by the Digital Learning Specialists. Professional learning activities also assist administrators and teachers to be able to target their instructional practices toward improving student achievement, such as training on how to use system-purchased software to analyze test results for areas of achievement and additional need.

Additional professional learning activities may be scheduled through content area curriculum coordinators, and/or through department directors. All professional learning activities are consistent with nationally established criteria for professional learning and focus on authentic connections to actual work responsibilities. These programs also promote research-based instructional practices that actively engage students in their personal learning and are applicable to daily work responsibilities, including teaching and learning. Classes are offered in a variety of methods and models, including face-to-face delivery, blended, and online delivery, during teacher workdays, before and after school hours, and during the school day during planning or other available release time.