



Camdenton Schools Comprehensive Technology Plan 2016-2020

Vision

Everyone Learning Every Day

Mission

Camdenton Schools Technology Services is committed to providing equitable and sustainable digital learning for all stakeholders.

As our society moves farther into the 21st century, instructional practices must quickly adapt to fully prepare our students to be successful. A focus on creativity, critical thinking, communication and collaboration is essential to prepare students for the future. In addition to these skills, effective 21st century citizens and workers must be able to create, evaluate, and effectively utilize information, media, and technology. Implementing appropriate technology into the teaching and learning process will aid our teachers and students in acquiring these necessary skills. In order to ensure the future success of our students, Camdenton R-III graduates need to leave as knowledgeable and creative critical thinkers who have the leadership and communication skills for the 21st century.

The 2015-2020 Camdenton Schools Strategic Plan identifies the following objective within the goal area of facility effectiveness: The Camdenton R-III School District will have facilities that are safe, and that enable, rather than inhibit, the delivery of a high-quality education. A progress measure given for meeting this objective reads:

A connected learning community will be developed through a comprehensive technology plan that identifies, develops, and provides access to the digital tools, devices, and support that will expand visionary administrative leadership, improve teacher effectiveness, and raise student achievement. This plan will be drafted during the 2015-2016 school year and launched in time for the 2016-2017 school year.

The following Camdenton Schools Comprehensive Technology Plan aligns with and supports the vision and mission of Camdenton Schools. It addresses the strategic issues specifically addressed as technology needs in the strategic plan. This technology plan not only addresses these issues but also expands upon the strategic areas in which technology is inherently embedded. The strategic plan focuses upon equitable education, personalized learning, STEM, “skills for life,” and increased communication and collaboration. Achieving success in all of these areas requires effective and efficient technology integration.

Guiding Documents

A truly comprehensive plan not only looks at the goals and objectives of its organization, but it also takes into consideration recommendations from leading organizations in its field. The following documents guided the development of the Camdenton Schools Technology Plan:

[Camdenton Schools Strategic Plan](#)

[Camdenton School Board Goals](#)

[2016 National Education Technology Plan](#)

[ISTE Essential Conditions](#)

[ISTE NETS](#)

[Framework for 21st Century Learning](#)

Background

Audits

In compliance with the Camdenton Schools Strategic Plan, the Technology Department audited its existing tools and strategies. The Camdenton R3 Strategic Plan plan states, “An independent technology audit will be conducted to compare the district’s status and current plans for upgrading with model school districts.” In June of 2014, K12ITC conducted an audit of the district’s technology services. In addition to this audit, Midwest Computech evaluated the technology services department in January of 2016. The complete reports from these two audits may be viewed at the links below. Results of these audits are accessible to anyone using a Camdenton Schools GAFE account. If you would like to view these results and cannot, please contact Camdenton R-III Administration for assistance.

[K12ITC](#)

[Midwest Computech](#)

School Visits

Before beginning the technology planning process, technology department stakeholders visited and/or held Google Hangouts with the following schools:

School of the Osage (similar demographics and proximity)

Ozark (slightly larger and high performing)

Nixa (slightly larger, high performing, and innovative)

Reed's Spring (smaller but similar--microcosm of our district)
Parkway (much larger but fully Google Apps integrated)
Fort Osage (identical breakdown of schools and demographics and using Google Apps)

Findings:

Director Level Leader (final say in purchasing even if outside of tech dept)
Standardized Systems and Platforms
Service Level Agreement (SLA) and clear responsibilities/purchasing procedures
Instructional Support (no dual role)
PerTech Device Average Lower
Stronger Infrastructure (Network Backbone)

Stakeholder Data

Before beginning the technology plan drafting process, stakeholders were identified. The following stakeholders were given opportunities to share their opinions on various technology related topics via a surveying process:

- Students (7-11)
- Parents
- Teachers
- District Leadership
- Community Members

Results of these surveys are accessible to anyone using a Camdenton Schools GAFE account. ([see results](#)) If you would like to view these results and cannot, please contact Camdenton R-III Administration for assistance.

These stakeholders provided the team with enough data to begin the planning process; however, the team has identified that more input is needed as our school moves forward with technology integration.

Committee Members

Ryan Neal	Mark Mallahan
Sheena Self	Angie Rogers
Cheryl Hymes	Denise Richardson
Michelle Neal	Heather DeLaurent
Brett Thompson	Doug Starkey
Selynn Barbour	Erin Kaminski
Katie Dwiggin	Casey Biggers

Camdenton Schools Comprehensive Technology Plan

Goal

To create a connected learning community in which all students and staff have equal access to the technology resources necessary for enhancing instructional practices, personalizing learning, and acquiring digital-age skills.

Strategies and Action Steps

In order to better formulate the comprehensive technology plan, the committee divided into four key areas:

Innovative Teaching and Learning
Connected and Collaborative Learning Community
Ethics, Responsibility, and Equity
Systems and Procedures

Each team reviewed the guiding documents and stakeholder data, looking for key points related to their designated areas. The teams recorded the key points on the following google sheet. These key points were then used as starting points for their goal areas and strategies. The identified key points are accessible to anyone using a Camdenton Schools GAFE account. ([see key points](#)) If you would like to view these results and cannot, please contact Camdenton R-III Administration for assistance.

Goal Area: Innovative Learning and Teaching

Objective: Effectively integrate technology into instruction to enhance learning for all stakeholders and ensure college and career readiness.

Strategies and Action Steps

1. Improve teaching and learning through digital age learning experiences and assessments.
 - a. Utilize technology resources to personalize student learning, provide relevance, and inspire creativity.
 - b. Provide opportunities for students to use critical thinking skills to solve real-world problems using technology.
 - c. Design student learning activities in which students are actively using technology (collaboration, communication, critical thinking, and creation) as opposed to passively consuming content.
 - d. Support the district STEM initiative.

- e. Increase the availability and use of electronic resources and blended learning strategies in order to facilitate anywhere, anytime learning.
 - f. Provide students with multiple and varied digital age formative and summative assessments aligned with content standards and technology skills.
2. Engage in professional growth and leadership
 - a. Enhance learning opportunities for staff on how to effectively integrate technology.
 - i. Identify and implement instructional practices (such as project-based learning, Project Lead the Way, S.T.E.M.) that inherently require the integration of technology into the teaching and learning process.
 - ii. Provide flexible and personalized learning opportunities in which staff can gain knowledge of instructional practices and instructional technology skills.
 - iii. Encourage teachers to model digital age work and learning.
 1. Establish methods for sharing exceptional instructional technology use across the district.
 - iv. Promote the development of personalized learning networks for staff members.

Goal Area: Ethics, Responsibility, and Equity

Objective 1: Cultivate an environment of respectful and ethical use of digital technologies.

Strategies and Action Steps

1. Research and implement digital citizenship awareness for all stakeholders.
 - a. Use an evolving curriculum beginning in kindergarten and progressing through 12th grade for the following areas:
 - i. Cyberbullying
 - ii. Appropriate online behavior/understanding of unsafe situations
 - iii. Digital etiquette
 - b. Provide awareness of digital citizenship to all stakeholders. (ex. parent nights, various media, etc.)
2. Increased and embedded focus on information literacy skills (ethical use of information).
 - a. Provide flexible training to educators on information literacy skills.
 - b. Ensure curriculum includes information literacy.
 - c. Create/Update district copyright guidelines.
3. Cultivate a culture of respectful use of equipment.
 - a. Use an evolving curriculum beginning in kindergarten and progressing through 12th grade for the following areas:
 - i. Personal equipment
 - ii. District-owned equipment
 - iii. Other

Objective 2: Provide equitable access to resources and opportunities for digital-age skill acquisition.

Strategies and Action Steps

1. Provide equitable internet access.
 - a. Research various ways to provide students with equitable internet access outside of the school day.
 - b. Ensure all buildings have equitable access to internet throughout the day.
 - c. Find a balance between a robust private infrastructure and reliable public access.
2. Ensure all stakeholders have appropriate device access.
 - a. Begin planning to provide students with personal learning devices.
 - b. Construct processes to provide equity between buildings' equipment.
 - i. Buildings will be provided technology funds on a per pupil basis.
 - ii. Encourage buildings to acquire additional funds as needed through grant writing.
 - c. Create lifecycle expectations to keep technology current.
 - d. Investigate the addition of technology fees/community partnerships to help fund equitable access.
3. Provide equitable opportunities and support for digital aged skill acquisition.
 - a. Seek out more data regarding the needs of all stakeholders (identify/define our digital divide).
 - b. Embed digital skills ("skills for life") into curriculum k-12.
 - i. Research programs and/or strategies for assessment of digital skills.
 - c. Personalize learning for all stakeholders through flexible learning opportunities.
 - d. Provide equal access to instructional technology support personnel on a per pupil basis.
 - e. Set expectations for accountability in using digital skills for teaching and learning.

Goal Area: Collaborative and Connected Learning Community

Objective: Utilize technology tools and resources in order to establish a collaborative and connected learning community.

Strategies and Action Steps

1. Identify and adopt technology tools that will ensure clear and uniform communication and collaboration between all stakeholders no matter where they live within the district.
 - a. Utilize technology programs that encourage collaboration.
 - b. Promote district programs and events through social media.
 - c. Increase district website presence, provide uniformity between building webpages, and increase accuracy of posted information.
 - d. Establish uniform communication methods between school and stakeholders.
 - e. Seek methods to increase personalized communication between school and home.
 - f. Monitor the effectiveness of adopted communication and collaboration tools.
 - i. Committee will be assembled, consisting of parents, faculty, administrators, students and non-parent patrons, to monitor and advise on changing needs.

- ii. Committee meetings will be held. Local media and a dedicated space on the district website and newsletter will publicize news and information about the committee's work.
 - 1. Committee spokesperson will attend different community gatherings to publicize news as well as bring back public input back to the committee.
- 2. Increase global collaboration opportunities for our teachers and students in order to ensure student achievement in essential skills for success in today's world, such as critical thinking, problem solving, communication and collaboration.
 - a. Utilize ISTE and DESE standards as well as model districts to establish best methods for collaboration and communication through technology.
 - b. Develop academic offerings and learning experiences through technology to better serve students of all skill levels and interests.
 - a. Use technology to connect with community and global resources that will assist our students and teachers in acquiring these essential skills and meeting standards and expectations.
 - b.

Goal Area: Systems and Procedures

Objective: Review, refine, and develop district technology systems and procedures in order to support continuous improvement in student achievement and to strengthen customer service delivery and user experiences.

Strategies and Action Steps

1. Review current district structure and modify to meet the changing technology needs of the district.
 - a. Utilize DESE standards and model districts to ensure adequate coverage and retention incentives (ex. Certifications, etc).
 - b. Establish leadership.
 - c. Provide support staff.
2. Reevaluate technology acquisition procedures.
 - a. Adjust budgeting procedure to allow more local control of technology budgeting and purchasing under the supervision of the director of technology.
 - i. Provide buildings with yearly budget.
 - ii. Provide various guidelines to set the buildings up for success (ex: save 10% for replacement, PC lifecycles)
 - b. Create and update an easy purchasing guide for new technology and replacements orders.
 - c. Develop a procedure for piloting new technologies (successfully piloted items may be added to purchasing guide).
 - d. Support instructional technology leaders of each building ensuring clear understanding of expectations.
3. Implement a Service Level Agreement between all technology stakeholders.

4. Outsource services as need to maximize efficiency of the technology services department.
5. Mainstream and maintain system support (server room) to ensure an array of available resources.
 - a. Virtualize all existing physical servers.
 - b. Consolidate district storage.
 - c. Implement multiple disaster prevention and recovery systems.
 - d. Standard servers, operating systems, and methodologies.
6. Modernize network and practices to ensure an array of available resources.
 - a. Provide dedicated access points in all educational areas.
 - b. Fiber all switches to building demarc 10 gb.
 - c. Provide 1gb connections to all clients.
 - d. > 10 gb fiber from building to server room.
 - e. Increase district feed to 1 gb.
7. Encourage responsible use of district resources.
 - a. Provide and use more electronic resources to minimize waste of materials.
 - b. Increase communication of guidelines for using district resources.
 - c. Minimize inefficient practices through effective leadership.
 - d. Utilize a district awareness mindset versus individual building/classroom mindset.
 - e. Start communication of Moral Contract as referred to in the SLA and computer use policies.
8. Ensure Privacy of all stakeholders.
 - a. Perform Cyber audit and review (enact) suggested items.
 - b. Evaluate Cloud based versus private storage.
 - i. Recommend and implement appropriate course of action for teacher and student personal shares and sensitive district data.
 - c. Assess Content filtering efficacy by ensuring necessary and safe access to external data sources.
 - d. Minimize Metadata trail by limiting exposure to external entities.
 - e. Provide robust, reliable security by implementing the following:
 - i. Use standardized tools for intrusion detection and prevention.
 - ii. Limit user group policies for software and hardware installation.
 - iii. Enhance detection and prevention of malwares.
9. Review, refine and increase professional development to increase understanding of technology and district systems and processes.
 - a. IT - how technology works
 - i. Offer new Technology PD for Teachers
 - ii. Offer training opportunities for other staff and students
 - b. Provide opportunities for training from Third Party Vendors for hardware/software projects.
 - c. Create policies/procedures for obtaining PD through building level PD committees.