

Working Together... Educating with Excellence... Inspiring Learners for Life



Brookings School District 5-1  
Technology Plan  
Updated 2020

Technology Plan  
March 2020

Organization Information  
Brookings School District 5-1  
Brookings, South Dakota

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### **Organizational Leadership and Technology Committee**

The Brookings School District Technology Department consists of five individuals and handles the day to day operations of the technology

throughout the entire school district. We also have Infinite Campus Administrator/Webmaster that works out of the admin office. At each building, there are also teachers that serve as building level techs to help staff and students with technology troubleshooting. The members of the Technology Department meet on a regular basis and is comprised of the following people

- Jason Smidt – Director of Educational Technology and Knowledge Management
- Adam Vaux – Network Administrator
- Travis Vlaminck – System Administrator
- Kory DeGroot – IT Helpdesk Support
- Theresa Crawford – Infinite Campus Administrator/Webmaster

Members of the technology staff regularly meet with staff at each of the buildings to address technology needs and concerns. Recommendations are also brought to the technology department by our building level techs and other staff members. We also utilize an in house technology ticket website that staff use to request services for the technology department.

We also have a technology committee in the Brookings School District. The mission statement of this committee is as follows

*The Brookings School District technology committee promotes the use of technology to support student learning, enhance instruction, and improve district operations.*

The district-wide technology committee will develop and maintain the district technology plan, assess technology needs of students and staff within the district, and support ongoing training and professional development needs. In collaboration with the district curriculum and instruction needs, the committee will identify and promote resource acquisitions to advance technology and its use by students and staff. This committee will meet quarterly and consists of technology staff, teachers, and administrators from all buildings. Members include:

- Cassandra Schull
- Ken Vigdal

- Darcie Malcom
- Kali Lamp
- Sarah Jacobsen
- Amy Schneider
- Alec Johnson
- Michelle Vandeweerd
- Adam Vaux
- Travis Vlaminck
- Jason Smidt

## **District Overview**

### Mission Statement

*The Brookings School District prepares all learners to be confident engaged citizens empowered to impact the ever-changing and inter-connected world.*

The Brookings School District serves the community of Brookings, SD and the surrounding area. The Brookings School District has an enrollment of 3,476 students in grades Pre K – 12 and has about 400 staff members. The Brookings School District is comprised of 10 buildings

- Brookings High School
- Mickelson Middle School
- Camelot Intermediate School
- Medary Elementary School
- Hillcrest Elementary School
- Dakota Prairie Elementary School
- Admin Building
- Bus Barn
- 5<sup>th</sup> Street Gym
- CTE Building

Our school district recognizes the changing world that our students are growing and learning in. In order to prepare these students, we feel the implementation and integration of technology at all levels is vital to our

students' education. With all the digital content available, our students are not hindered by classrooms and buildings. Learning can be done on so many different levels and it is our duty to prepare our students to thrive in that world. Our goal is to integrate technology to enhance the learning process.

The Brookings School District envisions that technology is accessible for all staff and students:

- to meet the educational needs of all learners across the curriculum
- to create students that are collaborators, problem-solvers, and critical thinkers
- to promote digital citizenship
- to improve the effectiveness of administrative tasks
- to address diverse learning styles and paces
- to improve communication in all areas
- to improve academic achievement
- to master the necessary technology skills as demanded by the workplace and society
- to provide universal access to information and be able to assess and share that information

### **Technology Department Mission**

The Brookings School District Technology Team will provide the highest quality technology-based services to facilitate the Brookings School District. The Technology Team works with students and staff as it applies to the management, teaching, learning, and community service.

To meet this mission we will:

- Provide effective technology support for audio/visual, computer, multimedia, voice, video, and web based applications and services all sections of the Brookings School District.
- Promote and facilitate the effective integration of technology in the scope of the Brookings School District Curriculum.
- Develop, enhance, and manage the Brookings School District networks to provide high speed, transparent, and highly functional connectivity among all information resources.

- Develop and maintain highly effective, reliable, secure, and innovative information systems to support instructional, administrative and research functions.
- Facilitate the collection, storage, security and integrity of electronic data while ensuring appropriate access.
- Provide capabilities including the ability to develop and manage the distribution (and marketing) through broadband, software, the Web and other telecommunications technologies.
- Promote new uses of information technology within the Brookings School District through the support for exploratory and innovative applications.
- Provide leadership for effective strategic and tactical planning in the use of technology
- Provide fast & reliable access to all information systems.

## **Roles of the Technology Department**

The Brookings School District Technology Department has many roles to ensure the success of the staff and students. We feel that a refresh rate of four years is best for our district. In our experience devices over four years old impact staff and students with performance issues such as low battery life, slow performance, and unreliability. Replacing devices after four years ensures that our devices are up to date and reliable.

## **Device Deployment**

The deployment of technology devices will be decided on by the building principal and the technology department with input and recommendations from staff members. We feel that a refresh rate of four years is best for our district as this ensures that our devices are up to date and that our budget is able to handle the refresh of devices. In certain situations, we will use a device for a fifth or sixth year depending on how well the device is performing and what it is used for. We ensure that the devices we purchase are compatible with our state and local assessments and any other software needs. BHS is currently the only building in which we do a three year cycle. This is because our 1:1 student devices are on a three

year lease and we want them to be covered under an accidental warranty plan.

The Brookings School District has policies for our devices in each of their handbooks. BHS is the only school we currently have students bring their devices home. At BHS, parents sign an insurance agreement and pay a fee each year to take their laptops home. We also have a scholarship program for this fee. New BHS students go through a laptop orientation class to show them how to use and take care of their devices. Each student signs a laptop care agreement document and a student pledge checklist. We will continue to evaluate the opportunity of our MMS students to bring their devices home but for now they keep their devices at school.

### **Student Devices**

- BHS  
BHS has an enrollment of 971, BHS is a 1:1 school. All students are checked out a Lenovo Yoga 11E Device at the start of each year. We collect these devices at the end of each school year to do maintenance and updating. These devices are on a 3 year lease and are returned to Lenovo at the end of the lease agreement. Students keep their same device for the entire lease duration. Incoming freshmen receive the departing Seniors devices.
- MMS  
MMS has an enrollment of 847, MMS is also a 1:1 school. These devices do not go home with our students and are kept in the classrooms in mobile carts. Our students can log into any device and have access to their files via google drive. These devices stay in the classrooms, which has dramatically helped in the amount of accidents that students have with devices. We purchased these devices by grade level on a 4 year rotation. We are looking at moving the MMS 1:1 program to a lease program much like BHS, our details for this are outlined in the recommendation section.
- Camelot  
Camelot Intermediate School has an enrollment of 491. Camelot's devices consist of computer labs and mobile carts that are split

between the 4<sup>th</sup> and 5<sup>th</sup> grade. We also have iPad carts in each of these grade levels. We are also investigating moving Camelot to a 1:1 lease program.

### K-3 Elementary Schools (Medary, Hillcrest, Dakota Prairie)

School	Enrollment	Student Device Count
Medary Elementary	349	312
Dakota Prairie	514	249
Hillcrest	304	200

These devices are spread between our MCL classes and our traditional classes. In the last three years we have increased the number of student devices at all of our k-3 buildings. These devices are a combination of mobile carts, classroom devices, iPads, and lab devices.

### Staff Devices

The Brookings Technology Department feels that in order for our staff to be successful they need a reliable and robust device for everyday use. All licensed teachers will receive a school issued laptop for use at school and at home. In certain situations staff members will also have a desktop to run their interactive white board. For the 2018-19 school year we replaced all middle and high school teacher laptops and for the 2019-20 school year we will be replacing all k-5 teacher laptops. Replacement of interactive whiteboard devices will be done on an as needed basis.

### Department Support

In addition to supporting curricular needs of staff and students the technology department also supports the organizational departments that are vital to the Brookings School District. All of these departments rely heavily on functional and updated technology.



*Child Nutrition* – The child nutrition department utilizes a completely web based program for inventory, payment, and delivery of child nutrition services. Each building has multiple endpoints that are vital to a smooth operation of our child nutrition services. Each building coordinator for child nutrition has a dedicated office station in addition to their checkout line workstations. We also keep the child nutrition website page updated with pregnant information and updated lunch menus.

*Business/District Office* – The Business District Office also relies heavily on technology for all day to day activities. We have multiple workstations and servers that we maintain. It is important that our secretaries and admin staff have functioning technology as everything they utilize on a daily basis involves technology.

*Transportation Department* – Our district has a large fleet of busses equipped with various technologies. We maintain and support the camera systems as well as the GPS system that is used by our director of transportation. Between the transportation and groundskeeping offices we have multiple devices served from our high school servers.

*Activities and Athletics Department* – The technology department also supports our activities staff which also includes our director of activities and a secretary. We maintain and support their devices as well as their website section. We support the scoreboards, coaches, as well as other technology devices that are used during events. Most of these devices utilize our network and additional devices to function correctly. We work directly with Daktronics for our displays at our numerous sites. Our activities/athletics department also broadcasts games/events using our existing infrastructure.

*Nursing* – The Brookings School District employs nurses at each of our schools. These nurses all have access to a workstation which is used to

view and support our student's needs. Our nursing staff heavily utilizes our Student Management System(Infinite Campus) for all of our students medical needs. They also utilize our wireless network to monitor student medical conditions.

*Staff Wellness* – We maintain the wireless infrastructure for the staff wellness room. Most of the equipment in the staff wellness room also utilizes our wireless network. We also maintain the staff wellness page on the district website.

*Dakota Prairie Community Room* – We are very fortunate and proud to have a community room which is utilized for various events such as staff training, school board meetings, and other professional development opportunities. The community room is set up with two cameras, two projectors, and a Tri-caster all linked through a broadcast management system that allows us to live stream or record events. This room allows us to record and broadcast very professional broadcasts.

*Project Search* – We also provide off campus support for Project Search. This program is housed at South Dakota State University.

## **Infrastructure**

In order for the Brookings School District to function it needs a reliable wired and wireless network. Communications, day to day work, research, student data, and much more depend on a fully functional technology infrastructure.

The schools in the Brookings School District are connected by a high speed fiber optic network made possible by partnerships with SDN, BIT, K12 Data Center, and Swiftel Communications. Our main connection at BHS is 10GB

and serves all of our other sites. Each site to site connection is no less than 1GB. We utilize a Fortient Content Filter provided by the State of SD to filter our internet with separate filters for staff and students. This makes us compliant with CIPA and is used on site and off site. We utilize a combination of Windows and Linux servers for our Active Directory, DHCP, Printing, and other services. The Brookings School District offers a robust and reliable wireless network at all of our buildings using Aruba and HP access points and wireless controllers. Our buildings use HP/Aruba switches and routers in all of our wiring closets. We utilize an internal phone network that is maintained by Swiftel Communications.

All of the classrooms in the Brookings School District are equipped with a projection system or interactive white board. This allows our staff to provide quality instruction and interaction to our students. Some of these devices are projection and others are touch enabled LCD screens.

The main goal of our technology resources is to aid in the educational process. Our technology is one tool in the toolbox for our teachers to engage and educate the students of the Brookings School District. The Technology department is constantly evaluating the current technology and the new technology that could be of use by our staff and students. Technology changes so quickly, our plans need to be fluid and flexible. As the needs of our students and staff change we will change accordingly.

### *Other Technology tools*

Brookings School District utilizes a variety of tools to ensure the success of staff and students. Our staff are issued an email account from the K12 data center, the K12 data center provides email accounts for staff and students across the state of SD. Our staff are also offered Google Suite services tied through the K12 data center. Our staff also create websites through school wires, google sites, and other web hosting solutions. These programs increase internal and external communications. Brookings School District staff also utilize Learning Management Systems to deliver instruction to students. District wide staff and students have access to Microsoft Office and Google Drive. At BHS we offer staff and students the Adobe Creative Cloud Suite. Students 4-12 are issued student emails through the K12 data

center and also have access to the Google Suite Services. Students utilize Google Drive cloud storage and backups.

### **Customer Service and Technology Support**

The technology department utilizes an in house ticket tracking site to address technology issues and requests. Staff members submit a ticket via our district website and alerts are sent to all technology staff to ensure timely resolutions. Also at each site there is a building level tech that assists with basic technology troubleshooting. Each of our technology members has a district issued cell phone to ensure easy access for staff.

### **Procedures**

Brookings School District follows the Child Internet Protection Act(CIPA) that includes maintaining a content filter at the district level. The Brookings School District also teaches about digital citizenship, cyber bullying, and other online behaviors.

Brookings School District also has an acceptable use policy that students agree with before using any technology devices. There are also detailed policies in each school's hand book.

### **Recommendations:**

This portion of the Technology Plan is going to be for recommendations from the Technology Department. This will be an ever changing section of the documents as our needs change from year to year. We understand that not all of these recommendations can be fulfilled, but we feel that these will improve the quality and reliability of our technology resources.

### **District Wide LMS**

As a department, we feel that having a singular LMS that encompasses our K-12 spectrum would be very beneficial to our district. Currently we are using a variety of Learning Management Systems to fill our needs. Going to a singular LMS would help us in a variety of ways. First off, our professional development and training for the staff would be easier and more consistent if we had one LMS. Troubleshooting and support would

also be more efficient if we only had one LMS to handle. With the MCL environment becoming more prevalent, student transitions from year to year will be easier and more consistent. Their work would also transition with them from year to year. In our research we have found that districts with a single unified LMS have more success. The process to select a unified LMS will involve the technology and curriculum committees, ad team members, as well as other staff members.

### **MMS 1:1 Leasing**

The tech department recommends we switch from purchasing student devices to leasing student devices for our middle school 1:1. Currently we are purchasing devices for each grade level on a yearly basis for example, in 2016 we purchased 8<sup>th</sup> grade devices, 2017 we purchased 7<sup>th</sup> grade devices, and 2018 we purchased 6<sup>th</sup> grade devices. This causes several issues including devices being different models, and devices being different ages and different performances.

Our goal is to transition MMS's current device replacement to mirror our lease replacement at BHS as we have had great success with support and user experience thanks to our lease replacement policy at BHS. This process also results in static and predictable payment amounts for the lease term.

The tech department is also investigating a 3 year lease vs a 4 year lease and possible impacts. We will be presenting quotes for both options at upcoming budget meetings.

### **Staffing/Budget**

#### *Technology Integration Specialist*

The tech department recommends creating a position for a Technology Integration Specialist within our district. This position would fill a need for us to have a contact to assist staff with integrating technology into their curriculum. This person would train staff on how to use various technology in the classroom setting and would be more rooted in education than technology.

### *MMS Help Desk Technician*

As we continue to expand our MMS 1:1 initiative we have identified a need to add a helpdesk technician position at MMS to assist and address student technology needs. This position would mirror our helpdesk position at BHS.

Understanding the current budget limitations, these positions would be phased in over the next five years using the annual budget process.

### *Software Budget*

The tech department also recommends that we create a software budget for district and curriculum software needs. Currently our technology budget for equipment is also spent on district software, this accounts for approximately \$150,000 a year. Some of these software purchases include our NWEA state testing, Microsoft Licensing, Renn Place, and other curriculum related software.

We recommend this be a separate budget item from the main technology budget.

### *Additional technology funding*

Our current budget doesn't allow us to maintain or add the desired technology lifecycle of four years. Where we are at now our entire technology budget can only replace about eighty percent of our outdated devices. Some of our devices were purchased via grants that are one time funding, these devices then fall on our budget to be replaced after their four year life cycle.

Our end goal to be phased in over the next five years is to have all student devices changed over to a lease rotation bringing the entire district k-12 to 1:1.

