



# DICKENSON COUNTY PUBLIC SCHOOLS TECHNOLOGY PLAN

Updated January 2023

## DCPS Mission Statement

The mission of Dickenson County Public Schools is to provide a safe, nurturing environment to educate and inspire students to become lifelong learners and to encourage intellectual, social, and physical growth in a diverse and changing society.

## District Instructional Technology Purpose

The purpose of instructional technology is to support and facilitate learning using instructional technologies.

## Technology Vision

To ensure that all learners are provided access, opportunity, and resources to develop into responsible users, consumers, and producers of technology. The DCPS K-12 technology program will prepare technology-literate students to be lifelong learners who make informed decisions about the role of technology in their lives. Students should have the opportunity to develop technology skills that support learning, personal productivity, decision-making, and daily life.

Areas of importance:

- Promote the effective use of technology to improve student performance
- Provide the greatest possible access to information resources
- Create an environment/climate of continuous use of technology
- Apply technology solutions to school and program mission, goals, and strategies
- Encourage/support new initiatives and innovation as a dynamic, continuous process
- Integrate technology in all areas of the district operations

## Philosophy

Dickenson County Public Schools considers technology to be a very important tool for instructors and learners alike. In the ever-evolving technological world, Dickenson County Public Schools remain attentive to emerging technologies and vigilant with matters such as cybersecurity. Staff and student safety as it pertains to technology is crucial in the manner in which Dickenson County Public Schools identifies success. The technology department considers the deployment of innovative technologies to assist instructors and learners to be one of the most important job functions they have. However, with the deployment of these technological tools, Dickenson County Public Schools must be observant in protecting their users from the harms of the digitally connected world.

## **TECHNOLOGY PLANNING TEAM**

### **Planning Group Leader:**

Ryan Wallace	Director of Technology Dickenson County Public Schools
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### **School Level Contributors:**

Jessie Tiller	Teacher Ridgeview High School
Amber Owens	Librarian Ridgeview Middle School
Heather Mullins	Teacher Clintwood Elementary
Nick Mullins	Teacher Sandlick Elementary
Chris Owens	Vice Principal Ridgeview High School
Dennis Deel	Central Office Director of Instruction

### **Technology Department Representative:**

Cody Browning	IT Assistant Dickenson County Public Schools
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Representatives are chosen to be on the technology committee through their knowledge and use of technology in the community and school division. Representatives meet to discuss technology needs and concerns within the school division. After discussion, a plan is developed and distributed to group members through a meeting or hand delivered to individuals not attending. At a later date, the group meets again to discuss the plan and make any needed changes.

## DCPS Technology Overview

As of January 2023, Dickenson County Public Schools has deployed a multitude of technology devices to aid in the learning, instruction, and safety of students. From a network standpoint, the district is utilizing the latest in firewall, switching, and wireless technologies. The systems that have been deployed to our end-users are configured with industry-proven hardware, and all of our classroom display systems are in the process of being updated to interactive touch boards. Our staff has access to a variety of software tools that assists with communication, lesson planning, and overall instruction. A defense-in-depth strategy has been carried out to aid the safety of students and staff members. This strategy consists of several tools that filter, monitor, and block malicious content from reaching our end users.

### Present Goals

**Goal:** Provide each student in the district with a computing device.

In today's era, computer literacy is an essential component of any student's learning plan. By providing students with access to the greatest learning tool ever invented--the Internet--they gain unprecedented access to resources and information. The applications and platforms available for Chromebooks and iPads further enhance their contribution to personalized learning.

- DCPS has been able to utilize recent grants and funding cycles to purchase enough Chromebooks and iPads to go over the 1:1 ratio of devices to students.
- The amount of damaged devices has certainly been a concern as the deployment of a high volume of units raises the rate of broken devices turned in to the technology department.
- The availability of replacement parts and the dedication of staff to repair devices aids in the ability to maintain appropriate inventory levels.

**Goal:** Provide more than sufficient training on technology applications, software, and hardware.

Training sessions give educators everything they need to effectively incorporate technology into their teaching. In the transition to a more virtual learning environment, it is imperative to properly train staff and students on how to properly utilize the applications, software, and hardware that have been provided.

- The influx of software from the past few school years has been a strain on staff members. The ability to properly train staff members on the assortment of software solutions is an important goal for the technology team.
- The variety of software will require subject matter experts in specific areas to provide training. These subject matter experts can range from in-house staff members to software-specific consultants.
- The consideration of Technology Coaches will be beneficial to the district as they can provide more detailed and district-oriented training to improve teaching, increase student engagement, and better prepare our students for the workforce they will go into after graduation.
- Training sessions need to be specific in terms of teacher grade levels, and specialized for new teachers.

## Short-Term Goals

**Goal:** Provide each classroom in the district with a modern interactive display board.

Interactive whiteboards integrate various learning styles into one experience. Students can learn by seeing, hearing, and interacting with the board through touch. This equips teachers with new, innovative ways to teach the same subject material. Because of this, students learn better and remember more. Interactive whiteboards are clean and require very low maintenance. No chalk or markers or other writing utensils are needed. Data is modified using a specialized pen for highlighting, drawing, and writing.

- The implementation of interactive boards has been an important measure taken by the technology department. Currently, all elementary schools have interactive boards installed, the goal of the technology staff is to have the boards installed at the middle and high schools by the 2024-2025 school year.

**Goal:** Survey and maintain current software needs based on usage.

During the COVID-19 pandemic, DCPS purchased a variety of software solutions to assist with virtual learning and virtual lesson plans. As DCPS now shifts into a post-COVID learning pattern many of these solutions are sporadically used. The goal for the technology team is to identify those solutions that are in high use and still serve as a need for DCPS staff and students.

- Many software solutions provide the technology staff with tools to verify usage, by providing this information the technology staff can quickly identify if the usage justifies the need to renew.
- Staff surveys will be conducted to gather more in-depth usage information.

## Long-Term Goals

**Goal:** Establish a classroom management system that provides effective communication, learning tools, lesson delivery, and content filtering.

A goal for the technology team is to provide an effective method in which staff and students are digitally connected. Classroom management systems such as Google Classroom, Canvas, and Go Guardian are being utilized heavily in the school district. As many school districts are becoming heavily invested in Classroom Management Systems, companies are starting to incorporate more effective systems that combine solutions from certain Classroom Management Systems into one solution.

- DCPS currently holds licenses in multiple Classroom Management Systems such as Google Classroom, Canvas, and Go Guardian. Each license holds its own cost and specific manner in which content delivery is provided.
- The future cost of holding multiple Classroom Management System licenses is a concern. With a variety of solutions available that are tailored to K-12 school districts, DCPS should look for an effective answer that provides all the required solutions.

**Goal:** Promote current and emerging technology-based resources that empower educators to develop strategies and practices to support student-centred learning.

The ability to find the next high-tech solution is a daunting task. School districts face challenges when they invest funds in solutions they believe will transform learning. These solutions must be successful for the financial

and technical state of the district. DCPS must have the ability to effectively find and implement these next-generation solutions to empower educators.

- Many resources exist for the technology and teaching staff for DCPS to research and demo solutions.
- These demos must be put in the hands of staff members to evaluate in a real-world scenario.
- Research and testing will be imperative for the success of implementation.

## Situations that Require Assessment

Computing device future, keeping a 1:1 or more ratio of devices to students.

In 2019, DCPS had approximately 1,500 student devices on hand. With an enrollment close to 2,000; DCPS was below the 1:1 device-to-student ratio that many school districts implement. With the COVID-19 pandemic, a push for virtual school was in place. That push allowed DCPS to purchase many devices to go well over the 1:1 ratio. As of January 2023, DCPS has approximately 4,000 student devices on hand. This has allowed the district to implement a bold strategy of a 2:1 ratio. The logistics of a 2:1 ratio allow a student to have a device at home and at school. However, with the lifecycle of Chromebooks and the lack of grants post-COVID, the allotment of student devices is slowly falling back near the 1:1 ratio. This is a situation that requires an assessment of how to maintain a 1:1 ratio in the future.

## Technology Strategies

Positioning ourselves for a more virtually connected school.

While some school districts have had virtual programs in place for years, the switch to remote learning during the COVID-19 pandemic has allowed many more districts to make virtual school a mainstay. A November 2021 survey by the EdWeek Research Center found that 39 percent of principals and district leaders converted snow days to remote learning days as a result of their experience with remote learning during the pandemic, and another 32 percent said they were considering it. DCPS has gone along with that trend and has implemented virtual days instead of cancelling classes in the face of inclement weather. The ability to make this move is stressed on several strategies DCPS must take, which include the following;

- Providing sufficient training to staff and students on virtual school.
- The capability of providing hardware and software that enhances virtual learning.
- The influx of high-speed broadband in the county.

## Copy of the DCPS Computer Acceptable Use Policy

### ACCEPTABLE COMPUTER SYSTEM USE

The School Board provides a computer system, including the internet, to promote educational excellence by facilitating resource sharing, innovation and communication. The term computer system includes, but is not

limited to, hardware, software, data, communication lines and devices, terminals, display devices, printers, CD, DVD and other media devices, tape or flash drives, storage devices, servers, mainframe and personal computers, tablets, laptops, telephones, cameras, projectors, multimedia devices, workstations, the internet and other electronic services and internal or external networks. This includes any device that may be connected to or used to connect to the school division's network or electronically stored division material. All use of the division's computer system must be (1) in support of education and/or research, or (2) for legitimate school business. Use of the computer system is a privilege, not a right. Inappropriate use may result in cancellation of those privileges, disciplinary action, and/or legal action. Any communication or material generated using the computer system, including electronic mail, social media posts, instant or text messages, tweets, and other files, including communications and materials deleted from a user's account, may be monitored, read, and/or archived by division staff.

This policy applies to all users of the division's computer system. By using or accessing the computer system, the user agrees to abide by this policy and the Technology Use Guidelines established by the superintendent. The superintendent is responsible for establishing Technology Use Guidelines, containing the appropriate uses, ethics and protocols for use of the computer system. The superintendent is also responsible for reviewing and updating, as necessary, the Guidelines at least every two years. It is the user's responsibility to know and follow this policy and the Technology Use Guidelines.

The Guidelines include:

- (1) a prohibition against use of the division's computer equipment and communications services for sending, receiving, viewing or downloading illegal material via the internet;
- (2) provisions, including the selection and operation of a technology protection measure for the division's computers having internet access to filter or block internet access through such computers, that seek to prevent access to: a. child pornography as set out in Va. Code § 18.2-374.1:1 or as defined in 18 U.S.C. § 2256; b. obscenity as defined by Va. Code § 18.2-372 or 18 U.S.C. § 1460; and c. material that the school division deems to be harmful to juveniles as defined in Va. Code § 18.2-390, material that is harmful to minors as defined in 47 U.S.C. § 254(h)(7)(G), and material that is otherwise inappropriate for minors;
- (3) provisions establishing that the technology protection measure is enforced during any use of the division's computers;
- (4) provisions establishing that all usage of the computer system may be monitored;
- (5) provisions designed to educate students and employees about appropriate online behaviour, including interacting with students and other individuals on social networking websites, blogs, in chat rooms, and cyberbullying awareness and response;
- (6) provisions designed to prevent unauthorized online access by minors, including "hacking" and other unlawful online activities;
- (7) provisions requiring every user to protect the security of information necessary to access the computer system, such as usernames and passwords, and prohibiting the sharing of passwords;
- (8) provisions prohibiting the unauthorized disclosure, use, and dissemination of photographs and/or personal information of or regarding minors; and
- (9) a component of internet safety for students that is integrated in the division's instructional program.

Use of the school division's computer system must be consistent with the educational or instructional mission or administrative function of the division as well as the varied instructional needs, learning styles, abilities and developmental levels of students. The division's computer system is not a public forum. Users of the division's computer system have no expectation of privacy for use of the division's resources or electronic devices including non-division owned devices while connected to division networks or computer resources.

Software and/or services may not be installed or downloaded on the division's computer system without the prior approval of the superintendent or superintendent's designee.

The failure of any user to follow the terms of this policy or the Technology Use Guidelines may result in loss of computer system privileges, disciplinary action, and/or appropriate legal action.

The School Board is not responsible for any information that may be lost, damaged or unavailable when using the computer system or for any information retrieved via the internet. Furthermore, the School Board is not responsible for any unauthorized charges or fees resulting from access to the computer system.

The School Board reviews and amends, if necessary, this policy every two years.

Adopted: May 25, 2005

Adopted: June 29, 2006

Adopted: May 27, 2009

Revised: June 9, 2010

Revised: June 26, 2013

Revised: March 27, 2019

Revised: June 26, 2019

Revised: June 23, 2021

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Legal Refs: 18 U.S.C. §§ 1460, 2256.

47 U.S.C. § 254.

Code of Virginia, 1950, as amended, §§ 18.2-372, 18.2-374.1:1, 18.2-390, 22.1-70.2, and 22.1-78.

Cross Refs.: EGAA Reproduction and Use of Copyrighted Materials

GBA/JHFA Prohibition Against Harassment and Retaliation

GCPD Professional Staff Discipline

GCQB Staff Research and Publishing

JFC Student Conduct

## DICKENSON COUNTY PUBLIC SCHOOLS

### TECHNOLOGY USE GUIDELINES

All use of the Dickenson County School Division's computer system shall be consistent with the school board's goal of promoting educational excellence by facilitating resource sharing, innovation and communication. The term computer system includes, but is not limited to, hardware, software, data, communication lines and devices, terminals, display devices, printers, CD, DVD and other media devices, tape or flash drives, storage devices, servers, mainframe and personal computers, tablets, laptops, telephones, cameras, projectors, multimedia devices, workstations, the internet and other electronic services and any other internal or external network. This includes any device that may be connected to or used to connect to the school division's network or electronically stored division material.



### Computer System Use-Terms and Conditions:

1. Acceptable Use. Access to the division's computer system shall be (1) for the purposes of education or research and be consistent with the educational objectives of the division or (2) for legitimate school business.

2. Privilege. The use of the division's computer system is a privilege, not a right.

3. Unacceptable Use. Each user is responsible for his or her actions on the computer system. Prohibited conduct includes but is not limited to:

- ☐ using the network for any illegal or unauthorized activity, including violation of copyright or contracts, or transmitting any material in violation of any federal, state, or local law.

- ☐ sending, receiving, viewing or downloading illegal material via the computer system.

- ☐ unauthorized downloading of software.

- ☐ using the computer system for private financial or commercial purposes.

- ☐ wastefully using resources, such as file space.

- ☐ gaining unauthorized access to resources or entities.

- ☐ posting material created by another without his or her consent.

- ☐ submitting, posting, publishing, or displaying any obscene, profane, threatening, illegal, or other inappropriate material.

- ☐ using the computer system while access privileges are suspended or revoked.

- ☐ vandalizing the computer system, including destroying data by creating or spreading viruses or by other means.

- ☐ intimidating, harassing, bullying, or coercing others.

- ☐ threatening illegal or immoral acts.

4. Network Etiquette. Each user is expected to abide by generally accepted rules of etiquette, including the following:

- ☐ be polite.

- ☐ users shall not forge, intercept or interfere with electronic mail messages.

- ☐ use appropriate language. The use of obscene, lewd, profane, lascivious, threatening or disrespectful language is prohibited.

- ☐ users shall not post personal information other than directory information as defined in Policy JO Student Records about themselves or others.

- ☐ users shall respect the computer system's resource limits.

- ☐ users shall not post chain letters or download large files.

- ☐ users shall not use the computer system to disrupt others.

- ☐ users shall not modify or delete data owned by others.

5. Liability. The school board makes no warranties for the computer system it provides. The school board shall not be responsible for any damages to the user from use of the computer system, including loss of data, non-delivery or missed delivery of information, or service interruptions. The school division is not responsible for the accuracy or quality of information obtained through the computer system. The user agrees to indemnify the school board for any losses, costs, or damages incurred by the school board relating to or arising out of and violation of these procedures.



6. Security. Computer system security is a high priority for the school division. If any user identifies a security problem, the user shall notify the building principal or system administrator immediately. All users shall keep their passwords confidential and shall follow computer virus protection procedures.

7. Vandalism. Intentional destruction of or interference with any part of the computer system through creating or downloading computer viruses or by any other means is prohibited.

8. Charges. The school division assumes no responsibility for any unauthorized charges or fees as a result of using the computer system, including telephone, data, or long-distance charges.

9. Electronic Mail. The school division's electronic mail system is owned and controlled by the school division. The school division may provide electronic mail to aid students and staff in fulfilling their duties and as an education tool. Electronic mail is not private. Students' electronic mail will be monitored. The electronic mail of staff may be monitored and accessed by the school division. All electronic mail may be archived. Unauthorized access to an electronic mail account by any student or employee is prohibited. Users may be held responsible and personally liable for the content of any electronic message they create or that is created under their account or password. Downloading any file attached to an electronic message is prohibited unless the user is certain of that message's authenticity and the nature of the file.

10. Enforcement. Software will be installed on the division's computers having internet access to filter or block internet access through such computers to child pornography and obscenity. The online activities of users may also be monitored manually. Any violation of these regulations shall result in loss of computer system privileges and may also result in appropriate disciplinary action, as determined by school board policy, or legal action.

Adopted: July 31, 1997

Revised: July 29, 1999

Adopted: September 19, 2001

Adopted: October 2003

Adopted: May 25, 2005

Adopted: May 27, 2009

Revised: June 26, 2013

Revised: March 27, 2019

Revised: June 26, 2019

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Legal Refs: 18 U.S.C. §§ 1460, 2256.

47 U.S.C. § 254.

Code of Virginia, 1950, as amended, §§ 18.2-372, 18.2-374.1:1, 18.2-390,

Copy of the Virginia Technology Standards for Instructional Personnel

Technology Standards for Instructional Personnel

8VAC20-25-10. Definitions.

The following words and terms, when used in this chapter, shall have the following meaning unless the context clearly indicates otherwise:

"Demonstrated proficiency" means a demonstrated level of competence of the technology standards as determined by school administrators.

"Electronic technologies" means electronic devices and systems to access and exchange information.

"Instructional personnel" means all school personnel required to hold a license issued by the Virginia Board of Education for instructional purposes.

"Productivity tools" means computer software tools to enhance student learning and job performance.

#### Statutory Authority

§ 22.1-16 of the Code of Virginia.

#### Historical Notes

Derived from Virginia Register Volume 14, Issue 10, eff. March 4, 1998.

8VAC20-25-20. Administration of technology standards.

A. School divisions and institutions of higher education shall incorporate the technology standards for instructional personnel into their division-wide technology plans and approved teacher education programs, respectively, by December 1998.

B. School divisions and institutions of higher education shall develop implementation plans for pre-service and in-service training for instructional personnel. The implementation plan shall provide the requirements for demonstrated proficiency of the technology standards.

C. Waivers shall be considered on a case-by-case basis of the 18-hour professional studies cap placed on teacher preparation programs for institutions requesting additional instruction in educational technology.

D. School divisions shall ensure that newly-hired instructional personnel from out of state demonstrate proficiency in the technology standards during the three-year probation period of employment.

E. Course work in technology shall satisfy the content requirement for licensure renewal for license holders who do not have a master's degree.

F. School divisions shall incorporate the technology standards into their local technology plans and develop strategies to implement the standards by December 1998.

G. Institutions of higher education shall incorporate technology standards in their approved program requirements and assess students' demonstrated proficiency of the standards by December 1998.

#### Statutory Authority

§ 22.1-16 of the Code of Virginia.

#### Historical Notes

Derived from Virginia Register Volume 14, Issue 10, eff. March 4, 1998.

8VAC20-25-30. Technology standards.

A. Instructional personnel shall be able to demonstrate effective use of a computer system and utilize computer software.

B. Instructional personnel shall be able to apply knowledge of terms associated with educational computing and technology.

C. Instructional personnel shall be able to apply computer productivity tools for professional use.

D. Instructional personnel shall be able to use electronic technologies to access and exchange information.

E. Instructional personnel shall be able to identify, locate, evaluate, and use appropriate instructional hardware and software to support Virginia's Standards of Learning and other instructional objectives.

F. Instructional personnel shall be able to use educational technologies for data collection, information management, problem solving, decision making, communication, and presentation within the curriculum.

G. Instructional personnel shall be able to plan and implement lessons and strategies that integrate technology to meet the diverse needs of learners in a variety of educational settings.

H. Instructional personnel shall demonstrate knowledge of ethical and legal issues relating to the use of technology.

Statutory Authority

§ 22.1-16 of the Code of Virginia.

Historical Notes

Derived from Virginia Register Volume 14, Issue 10, eff. March 4, 1998.