Executive Limitation #12: Technology

The Superintendent shall not fail to use technology to support teaching, learning, stakeholder engagement, communication, accessibility, innovation, efficient operational practices, and the Division's Strategic Plan goals. Technology resources are used in a balanced manner to augment and enhance student learning.



The Superintendent shall not fail to:

- 1. Implement an innovative, future-focused, comprehensive, and efficient approach to provide accessible and equitable technology resources in support of instruction, student learning, accessibility, and student activities.
- 2. Provide innovative, comprehensive, and robust managerial technology systems that provide for the collection of reliable, relevant, and valid data to inform decision-making, direct school, and instructional improvement planning, and address the needs of students, staff, and community.
- 3. Maintain a comprehensive and functional technology infrastructure system that is modernized based on industry standards and best practices.
- 4. Provide for a safe and secure computing environment for students and staff that:
 - a. Establishes expectations of use of technology by staff and students;
 - b. Provides a means for interactive communication between the school system and staff, students, families, and the community;
 - c. Prohibits the use of technology resources for commercial, political, or indecent purposes that disrupt the learning environment or those prohibited by federal, state, or local laws, or FCPS policies;
 - d. Uses methods of collecting, reviewing, transmitting, or storing information that protect against cyber threats and improper access to the information being elicited.
- 5. Establish appropriate boundaries and ethical guidelines for the use of artificial intelligence in educational and operational settings.
- 6. Provide the training, tools, and accessibility resources for appropriate staff to support the instructional needs and inclusion of all learners.
- 7. Ensure staff and students are provided with training and support to effectively, ethically, and safely use technology tools and resources provided by the Division and engage with these resources as digital citizens.
- 8. Deliver transparent information for families about the purpose and frequency of technology use in the classroom and the Division.

Superintendent's Interpretation:

This Executive Limitation calls on the Superintendent to use technology to support teaching, learning, stakeholder engagement, communication, accessibility, innovation, efficient operational practices, and the Division's Strategic Plan goals.

I interpret this to mean that the Superintendent shall work to ensure that technology is used in appropriate and ethical manners to support teaching and learning in the classrooms to enhance the student learning experience, as well as to support all staff in maximizing efficiency and innovation in their roles.

The Superintendent must also ensure that technology is utilized effectively as a method of ensuring optimal stakeholder engagement and communication.

Further, I also interpret this Executive Limitation to mean that it is the responsibility of the Superintendent to direct the work of the Division so that organizational structures are in place to implement and monitor our progress in these areas and to share updates related to this progress with the Board on a regular basis.

Evidence of Compliance:

Certification:

I hereby present my monitoring report on Executive Limitation #12: Technology (EL-12) in accordance with the reporting schedule set forth in the Board calendar. I certify that the information contained in the report is true as of January 23, 2025 to the best of my knowledge, information, and belief.

Evidence of Compliance: January 23, 2025

At the time of this report, to the best of my knowledge, information, and belief, I have gathered information and evidence that I believe supports compliance with the Board's Executive Limitation associated with this topic. In particular, I share with the Board the following information and indicators which I believe meets Executive Limitation #12.

Indicators Include, But Are Not Limited To, The Following:

1. Implement an innovative, future-focused, comprehensive, and efficient approach to provide accessible and equitable technology resources in support of instruction, student learning, accessibility, and student activities.

Newly Added or Updated Evidence for Indicator 1:

The <u>FCPSOn</u> program objectives ensure the availability of age-appropriate 1:1 devices for all FCPS students. Since SY 2020-21, the Department of Information Technology (DIT) has scaled student device availability to ensure every FCPS student has access to a device less than five years old. The table below shows current FCPS investments in student devices across all grade levels.

	FCPS managed 1:1 Student Device Investments				
Pre-K-2 Devices	3-6 Elementary School Devices	Middle Schools Devices	High Schools Devices	Total FCPS Managed Student Devices	
Pre-K & K iPads: 17,880 Grade 1-2 Laptops: 25,164 (SY 2021-22)	Laptops: 58,925 (SY 2020-21)	Laptops: 25,961 (SY 2024-25)	Laptops: 68,011 (SY 2023-24)	195,941	

Note: counts do not include devices that may be repurposed by schools from prior purchases, carts, or lab devices etc.

DIT purchases and maintains a fleet of updated teacher laptops to ensure classroom teachers are
provided a centrally funded laptop. Additionally, DIT manages the repair and/or replacement of the
manufacturer's defect for the entire device life at the school, reducing the burden on school budgets to
pay for repairs beyond warranty periods.

Centrally purchased Teacher Laptops				
Elementary Middle High Total Staff Devices				
10,344 (SY 2024-25) 2,481 (SY 2023-24) 5,833 (SY 2022-23) 18,658				

- FCPS has updated the centrally funded laptop refresh cycles to maximize technology resources and reduce E-waste. Starting with FY 2025 and beyond, student and teacher laptops will be refreshed every 5 years, a change from the previous 4 year replacement cycle.
 - DIT continues to ensure that devices meet instructional needs and are financially viable to acquire and support. The current student Chromebook device acquisition is \$444 vs \$467 (circa 2021) for the previously purchased Windows based Dell 3310.
 - An emphasis is placed on acquiring suitable student FCPSOn devices.
 - FCPS selected a Chromebook that provides students with a 14 inch display, an additional viewable display, unlike the previous Windows laptop. The larger screens offer support at secondary levels where students need to work with larger documents and visual data

- Durability is also a primary consideration when selecting a replacement device. OEM destructive testing found the Chromebook passed more durability tests of the increasing stringency industry-standard mil-std-810h test.
- FCPS opted to purchase a protective case for middle school Chromebook purchases as historical data shows MS laptops account for almost half of student device repairs.
- For staff devices, DIT worked with our laptop vendor in SY 2024-25 to implement a 14% cost reduction on the teacher laptop configuration, reducing costs from \$1,048 to \$900 per laptop.
- There are 234 FCPS supported instructional software applications for SY 2024-25. FCPS supported application tools have been vetted instructionally and should be available to all students in the Division, as academically appropriate. This includes, but is not limited to, basal resources, assessment tools, library databases, and creativity tools. The table below shows student engagement (how often an app has been used) on creativity and collaboration tools in the <u>FCPS instructional digital ecosystem</u> (such as Canva, Wixie, Adobe Creative Cloud Express, Peardeck, and Lucid).

Students Online Engag	ements with the FCPS Dig	gital Ecosystem tools that oration	focus on creativity and
	SY 2022-23	SY 2023-24	SY 2024-25 (as of December 2024)
Number of Student Engagements	3,247,629	4,074,842	3,039,367

- The Digital Ecosystem Library (DEL), a tool used to review and approve instructional applications, was updated to include comprehensive approval indicators from four offices within FCPS: Instructional Services, Procurement, DIT (accessibility, interoperability, privacy), and Cybersecurity. The DEL currently lists 1,346 instructional applications in various states of approval by FCPS for use in schools to support student learning.
- <u>Schoology</u> is the learning management system FCPS uses divisionwide to support instructional practices aligned to the <u>FCPS learning model</u> and help students reach the <u>Portrait of a Graduate goals</u>.
 - From August 5, 2024 to December 31, 2024, there were 3,519,977 unique materials within Schoology courses and 51,951,733 user sessions across all system roles (students, staff, & parents). This tracks when a user logs in, logs out, or returns to Schoology after 30 minutes of inactivity, a single user can have multiple user sessions during a school day.
 - From August 2, 2024 to December 31, 2024, Schoology shows 27,013 active parents and 503,250 parent sessions.
- Performance Matters is FCPS's integrated assessment and analytics system that supports purposeful
 assessment within the FCPS Learning Model and can be seamlessly displayed through Schoology. In
 SY 2024-25 Performance Matters is being utilized to deliver common assessments in math and science
 (for all elementary students and some middle and high schools).
 - From August 5, 2024 to December 9, 2024, there were 3,139 unique assessments with 815,310 unique student submissions.

Continuing Evidence for Indicator 1:

 FCPS provides MiFi devices to students where families request support due to a lack of resources or stable internet connectivity outside the school building. This builds upon our commitment to ensure every student can access a modern device and internet connectivity to support their digital learning.

Student MiFi Devices Checked Out		
SY 2023-24 SY 2024-25 (as of November 2024)		
1,711	1,161	

- Beginning in FY 2023, all 25 comprehensive high schools were provided equipment for Esports (now a VHSL activity). This included computers, monitors, keyboards, mice, and headsets. In FY 2024, these schools were provided with additional technology equipment for Esports. These purchases allow all high schools to have equitable access to the materials needed to have Esports teams compete in VHSL sanctioned Esports events.
 - In SY 2024-25, the Middle School After School program is working with PlayVS to expand Esports to FCPS middle schools, currently planned for Spring 2025. Through this program, middle school students will be playing each other in a regional schedule through the PlayVS platform.
- DIT refreshed high-end computing devices in SY 2023-24 for 20 school labs, providing state-of-the-art facilities for hands-on learning experiences supporting CTE, video production, and computing, leveraging cost savings from the student device refresh. For SY 2024-25 in the summer of 2024, DIT refreshed labs with 728 desktops and laptops at 28 schools, providing high end devices for CTE, Computer Graphics, and other Business and Fine Arts programs.
- DIT continues its "Every Employee Connected" program, which takes laptops coming off refresh cycles and installs a lightweight ChromeFlex Operating System (OS) to make these devices reusable for support staff while also extending the useful life of the devices.
 - During the first phase in SY 2023-24, FCPS redeployed over 2,000 devices to operational staff from transportation, food and nutrition services, and other teams.
 - Since May 2024, an additional 1,800 laptops have been distributed to FCPS staff members who
 previously did not have a computer, enabling them to stay connected and engaged.
 - This approach also supports Get2Green goals by reducing E-waste.
- 2. Provide innovative, comprehensive, and robust managerial technology systems that provide for the collection of reliable, relevant, and valid data to inform decision- making, direct school, and instructional improvement planning, and address the needs of students, staff, and community.

Newly Added or Updated Evidence for Indicator 2:

 To support Digital Parent engagement the <u>Online Registration System</u> has been expanded to include Online Student Registration, Online Verification/Update and Impact Aid. FCPS is currently in the process of developing an online registration process for Home Instruction, with an expected launch for the 2025-26 school year

- For SY 2024-25, the <u>Parent Digital Consent System</u> is available for families to consent to more resources across all of their students. School staff can efficiently manage, track, and act on these consents. The system also supports multiple translations to ensure accessibility for families. Using the enhanced system, families will be interacting in a consistent FCPS brand to consent for the following during SY 2024-25:
 - Digital Resource Consent SY 2024-2025
 - Parent Retest Permission Form for State Assessments
 - Fairfax County Youth Survey-Elementary
 - Family Life Education Grade 6 Opt-out
 - OPT-Out Form FCPS-Issued Laptop
 - Objection to Release of Directory Information
 - Release of Student Information to Outside Organizations
 - SEL Screener Participation
 - School Counseling Opt-Out
 - VarsityTutors.com

	SY 2024-25 Data from SIS Online Registration & Parent Digital Consent (as of December 9, 2024)				
	Students Registered via Online Registration	Student Record Updated via Online Verification/ Update	Impact Aid Forms collected Digitally (in-Process)	Students With ParentVUE Account	Parent Digital Consent response rate by grade level
High schools	1,613	9,877	21,530	89.53%	67.02%
Middle schools	326	6,677	7,449	90.88%	78.47%
Elementary schools	2,359	11,737	14,157	87.41%	67.04%
Total	4,298	28,291	43,136	88.77%	68.7%
	Prior Years' Data from SIS Online Registration & Parent Digital Consent				
Total for SY 2023-24	2,600	24,630	41,509	85.66%	N/A
Total for SY 2022-23	N/A	N/A	N/A	83.03%	N/A

 After a successful pilot in SY 2023-24, Multi-Tiered System of Supports (MTSS) was integrated into SIS and went into production for all schools in SY 2024-25, serving over 37,000 students with over 13,000 MTSS Plans created (as of January 8, 2025).

- DIT purchased Edupoint's expanded WIDA Module for the SIS platform and is setting up the module. This module will provide expanded Multilingual learner (ML) accommodation and case management functionality and is planned to be enabled for SY 2025-26.
- DIT continues to reinvest in new technology and systems modernization. Recently, DIT acquired
 modern tools that support Robotic Process Automation and enterprise strength low-code development
 platforms. These investments are anticipated to yield substantial returns with adaptive tools available to
 staff and families, accelerating digital transactions and reducing the labor required to support FCPS
 operations.

Continuing Evidence for Indicator 2:

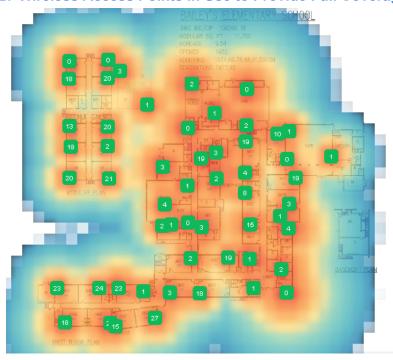
- The central system for FCPS student data collection is the <u>Student Information System (SIS)</u> supporting school operations and student data management. SIS is a comprehensive software platform designed to manage student data efficiently and securely and streamlines administrative tasks for educators and administrators enabling staff to track student progress, generate reports, and communicate effectively with parents and quardians.
 - SIS is continuously reviewed and extended to add new capabilities. For SY 2024-25 SIS was extended to support:
 - Immunization Data Collection Support & Improvements
 - SEL Screener Parent Mailer Automated Process
 - System Reporting Continuous Improvement
- DIT invested in building FCPS Data Fabric, which includes state-of-the-art data management platforms that can efficiently gather and process various data types, such as academic performance metrics, student demographics, staff feedback, and community input. The use of the Data Fabric has facilitated the development of data dashboards, enabling schools and central office teams to make data-driven decisions. These dashboards cover metrics related to student performance and division/school operations, including but not limited to chronic absenteeism, on-time graduation for all high school students, division-wide immunization compliance, and Algebra 1 course enrollment and performance.
 - From September to December 2024, these dashboards collectively received an average of 6,578 views weekly, with the top users including Elementary School Principals, School Social Workers, Assistant Principals, and School Counselors.
- Two dashboards, the Data Byte(s) and School Pulse, aim to provide actionable insights relevant to Division leadership and School Administrative teams.
 - Data Byte(s) updates are provided weekly and deliver critical and timely Key Performance Indicators (KPI) of Division initiatives directly to Division Leadership. In February 2024, a new data point for Algebra Readiness was added to support monitoring the progress of Strategic Plan Goal 3, Measure C (Successful completion of Algebra I by 8th Grade). In December 2024, a new Byte to monitor systemwide common assessments was released which enables leaders to monitor participation, with a performance analysis Data Byte slated for release in early 2025.
 - The School Pulse dashboard's development was driven by the Superintendent's vision to support school leaders by providing timely, relevant, and actionable data in a central location for easy access. The dashboard was launched in Beta form in April 2024, with an official release in Fall 2024. This dashboard is delivered weekly to school leaders via email, allowing them to track their school's key data points, including chronic absenteeism, enrollment, immunization noncompliance, and staff required training compliance.

3. Maintain a comprehensive and functional technology infrastructure system that is modernized based on industry standards and best practices.

Newly Added or Updated Evidence for Indicator 3:

- DIT ensures that the FCPS technology infrastructure is reliable and highly functional, adhering to
 industry standards and best practices. Additionally, systems must be affordable to acquire, operate, and
 maintain.
 - DIT operates large-scale infrastructure operations connecting 240 buildings via high speed fiber based network. FCPS has over 17,600 wireless access points throughout Division buildings ensuring staff, students, and operations teams can operate technology reliably in support of their job activities.
 - FCPS is migrating all wireless access points to modern Juniper MIST technologies. The project began in FY 2023, with expected completion in FY 2027. By the end of FY 2025 the mix will be 58% new Juniper access points and 42% old technology access points.
 - For any given building in the Division, DIT staff uses state-of-the art observability tools to ensure total wireless coverage of usable spaces eliminating dead spots. The design goal is to have 100% strong WiFi coverage in classrooms and instructional areas across all FCPS buildings.
 For locations with upgraded WiFi technology, the mapping tool is cloud and AI based. For older technology DIT uses manual methods relying on infrastructure controllers at each building.

Example: MIST Coverage map for Bailey's Elementary School with 27 Wireless Access Points in Use to Provide Full Coverage



Red = strongest WiFi signals, Yellow = WiFi coverage, Blue = low to no WiFi coverage

• In SY 2023-24 FCPS staff across all buildings submitted 381 WiFi trouble tickets, an average of 31.75 per month, representing approximately 1 ticket for every building every 5 months. DIT resolved 97.38% of those tickets within the Service Level Agreement (SLA), with critical issues resolved in four (4) hours. For SY 2024-25, 281 tickets have been raised to-date, and the issue resolution SLA rate is 98.98%.

- The FCPS fiber infrastructure between all FCPS buildings is supplied and maintained in collaboration
 with the Fairfax County Government as a shared service for all of Fairfax County facilities. Typically,
 disruptive fiber cuts happen when there is construction in the area and the contractors accidentally
 sever the local area fiber during a dig, which can impact internet connectivity for FCPS buildings. Fiber
 connectivity is restored by the service provider in collaboration with Fairfax County Government and
 FCPS DIT team.
 - Between January 1, 2023 and November 30, 2024, FCPS buildings experienced 17 fiber cuts, impacting network and telephone (VOIP) availability. During FY 2024-25 the Division experienced 6 outages due to Fiber cuts.
 - Inclusive of fiber cuts (which have a local, but not system-wide, impact), monthly system-wide network availability ranged from 99.93% - 99.99% during the previous school year and current school year to date.
- DIT manages a large and complex networking infrastructure with as many as 300,000 devices connecting to the network during peak usage during a school day, supporting student learning and Division operations. The DIT operations team aims to manage and support the FCPS demands on the networking infrastructure with the highest levels of uptime (99.93% - 99.99%).
 - The core networking routing infrastructure is housed in 14 different administrative locations and has not experienced any unscheduled service disruption in the last measured period from August 2023 to date. DIT schedules quarterly maintenance windows of three (3) hours each. DIT staff completed all maintenance within the allocated time windows without overruns.
 - DIT staff schedules maintenance during off-peak hours (such as evenings, weekends, or holidays) to perform necessary tasks, including maintenance, patching, and upgrading of FCPS networking equipment, especially when the work may interrupt services. As an example, in a weekend maintenance window during the 2024 Winter Break, DIT staff worked to upgrade the core firewall infrastructure, which impacted internet availability; separately, DIT performed Phone (VOIP) upgrade maintenance during the same holiday period, ensuring school and office operations remain unaffected.

Continuing Evidence for Indicator 3:

- DIT staff continuously monitors operational hardware and undertakes significant upgrades to maintain healthy operations of FCPS infrastructure to ensure a modern and stable technology environment.
 - Key infrastructure upgrades from SY 2023-24 include:
 - Replaced 1,642 network switches, including 85 in the Network Operating Center.
 - Upgraded 11,280 wireless access points improving WiFi coverage in FCPS buildings.
 - Installed 1,585 uninterruptible power supplies to support equipment uptime.
 - FCPS internet pipeline was upgraded for smoother and faster access to instructional and operational data.

Internet Upgrades		
2024 Increased secondary Internet bandwidth 20 Gbps to 40 Gbps		
2023 Increased primary Internet bandwidth from 40 Gbps to 100 Gbps.		
2022	Increased secondary Internet bandwidth from 10 Gbps to 20 Gbps	

Note: no additional upgrades in bandwidth are planned for 2025 given available bandwidth (see below).

FCPS Internet Bandwidth Utilization			
	SY 2023-24	SY 2024-25 (as of Dec 2024)	
Total Available Bandwidth	120 Gbps	140 Gbps	
Yearly Average Utilization	36.97%	27.78%	
Peak Utilization	65.41%	56.00%	

Note: This data shows that FCPS is increasing total bandwidth and has more than enough for the average and peak usage in schools. The Division is prepared to support more usage if needed.

- In alignment with the industry movement, DIT is implementing a "smart-cloud" approach to software access, prioritizing Software as a Service (SaaS) solutions or shifting to our preferred cloud Platform as a Service (PaaS). With this strategy, DIT can avoid the typical large capital expenses that occur with aging servers, given DIT uses operational budgets to fund all infrastructural upgrades.
 - DIT continues to convert physical servers in the Data Center into virtual machines to provide more resilience, scalability, and cost savings and streamline the deployment and backup processes.
 - Current physical server count: 185 (55 VMWare ESXi hosts;100 Windows servers; 30 Linux servers).
 - Current virtual server count: 1,236 (1,030 Windows; 206 Linux servers).

4. Provide for a safe and secure computing environment for students and staff that:

- a. Establishes expectations of use of technology by staff and students;
- b. Provides a means for interactive communication between the school system and staff, students, families, and the community;
- Prohibits the use of technology resources for commercial, political, or indecent purposes that disrupt the learning environment or those prohibited by federal, state, or local laws, or FCPS policies;
- d. Uses methods of collecting, reviewing, transmitting, or storing information that protect against cyber threats and improper access to the information being elicited.

Newly Added or Updated Evidence for Indicator 4:

- According to data tracked via internal Vulnerability Management tools, DIT staff remediates
 vulnerabilities almost twice as fast as the average across all industries tracked in our system. A shorter
 meantime to remediate vulnerabilities is a strong cybersecurity measure as it reduces the window of
 opportunity for threat actors to exploit those vulnerabilities.
- DIT uses state-of-the-art intrusion prevention, alert detection tooling, and an industry leading endpoint detection tool is deployed to all vulnerable endpoints managed by DIT.
- In November 2023, DIT initiated a pilot program for the Lightspeed Classroom Management System in select schools across FCPS. This program aimed to enhance classroom instruction by providing teachers with tools to monitor and manage student activity in technology-enriched classrooms and online learning environments. Following the pilot's success, DIT purchased and expanded access to the application enabling divisionwide implementation for SY 2024-25.
 - As of December 2024, Lightspeed Classroom Management has been integrated into 185 of our 199 schools and centers.
 - Feedback from teachers using the Lightspeed Classroom indicates that the application has a
 positive impact on the learning environment.

Continuing Evidence for Indicator 4:

- The Office of Cybersecurity (OCS) tracks our maturity on the National Institute of Standards and Technology (NIST) Cybersecurity Framework (CSF) with a specific focus on recommended industry controls (Center for Internet Security Top 18 Controls). Controls play a key role in improving our cybersecurity maturity. In addition, OCS is in the process of mapping our assessment and authorization processes with the NIST Risk Management Framework (RMF).
- Regulation 6410: Appropriate Use of Fairfax County Public Schools' Network and Internet Resources
 was updated in July 2022. Some of the updates include adding coverage for all FCPS technology
 resources, networks, and services on and off-premises, updating inappropriate content to include
 threatening and harassing content, and adding reporting requirements for trademark infringement and
 entities fraudulently impersonating FCPS.
- Every year, all FCPS employees, students and their parents or guardians must sign an Acceptable Use Policy (AUP), which establishes the rules for everyone who uses FCPS technology resources, emphasizing responsible digital behavior and consequences for misuse.
- Regulation 7004: Management of Fairfax County Public Schools External Communications was
 updated in January 2024 to include new requirements and responsibilities for employee use of social
 media. The regulation includes new definitions and rules for official, professional, and personal social
 media accounts as well as requiring staff to review FCPS' Social Media Guidance for Staff annually.
- FCPS provides multiple systems of communication with various FCPS stakeholders supporting both personalized and mass engagement. Engagement with students, parents, and staff are informed by our strategic approach:
 - <u>TalkingPoints</u> is an interactive tool for educators to communicate with parents and guardians. Its user-friendly interface facilitates seamless interaction between staff, students, families, and the community. This tool helps to overcome language barriers, offering automated translations based on family preference.
 - All FCPS schools have used TalkingPoints this school year to send messages and announcements.
 - During SY 2024-25 TalkingPoints has been utilized to send over 9.1 million announcements and messages in approximately 75 languages (data as of November 2024).

TalkingPoints Usage Over Time				
	SY 2022-23	SY 2023-24	SY 2024-25 (Aug 2024-Nov 5, 2024)	
Families who sent at least one message to a teacher	58,612	108,002	88,886	
Teachers and administrators who sent at least one message to a family	5,378	9,699	10,600	

 Families can use <u>ParentVUE</u> to access student information such as attendance, report cards, class schedules, grade books (MS and HS), course history, and certain test history. Additionally, score report letters that provide context for assessment results and interpretation guidance are

- also found in ParentVUE. Families without ParentVUE accounts and/or those who request it also receive this information by U.S. mail.
- FCPS utilizes <u>eNotify</u> (SchoolMessenger) to send mass emergency notifications and essential information (i.e., attendance notifications, low lunch balance, and bus notifications) to parents and staff in multiple languages via SMS text, email, and phone call.

Number of eNotify Communications by Topic Area

		ily Communications		
	SY 2024-25 (A	ugust 1, 2024 - Dece	mber 31, 2024)	
	FCPS Environment	Food Services	Summer Learning	Total
Phone Calls	1,064,764	43,482	-	1,108,246
Emails	10,080,111	1,698,558	-	11,778,669
SMS (Text Messages)	4,381,546	-	-	4,381,546
SY 2023 - 24 (August 1, 2023 - July 31, 2024)				
	FCPS Environment	Food Services	Summer Learning	Total
Phone Calls	2,706,559	30,133	2,895	2,739,587
Emails	19,065,746	974,195	19,515	20,059,456
SMS (Text Messages)	8,772,023	-	2,769	8,774,792
	SY 2022-23	6 (August 1, 2022 - Ju	ıly 31, 2023)	
	FCPS Environment	Food Services	Summer Learning	Total
Phone Calls	1,709,922	87	2,971	1,712,980
Emails	12,968,744	484,215	14,808	13,467,767
SMS (Text Messages)	5,166,195	-	2,822	5,169,018

- News You Choose (GovDelivery) is a subscription-based communications tool used for email distribution of non-critical messages, such as weekly newsletters. Families, community members, and staff can subscribe to hundreds of newsletters, including school newsletters, FCPS This Week, School Board member newsletters, and many others.
- Schoology, FCPS' online Learning Management System (LMS), offers round-the-clock access
 to classroom materials for students in a secure digital environment. Additionally, it features a
 parent portal enabling parental engagement and observation of student learning within the LMS.
 Schoology is also used to communicate with staff by grade level and content area.
- <u>Let's Talk</u> captures family and community feedback. It includes analytics capabilities to track communication trends and identify areas for improvement in school operations.

Let's Talk Dialogues		
SY 2023-24 SY 2024-25 (as of December 2024)		
10,902	12,793	

- FCPS employs a multifaceted approach to internet filtering and access management, aiming to balance digital material requirements at every school with child safety and legal compliance.
 - FCPS implements <u>Policy 6401</u>: Use of Fairfax County Public Schools Network and Internet Resources which establishes guidelines for accessing and using FCPS network resources, providing students reasonable protection from inappropriate internet content.
 - FCPS complies with the <u>Children's Internet Protection Act (CIPA)</u> by using <u>Lightspeed</u> internet filtering software to block inappropriate sites for minors. Lightspeed categorizes and blocks sites, with exceptions for staff and specific educational purposes. This filter blocks over 20 million sites in an average school week and monitors over 667 million websites a month, with over 39 million searches and blocking over 72 million sites in a 30-day window.
 - DIT and OCS staff coordinate with vendors and the Chief Academic Office (CAO) to quickly resolve any unexpected blockage of student access to digital assessment platforms within the Division assessment program, such as WIDA and iReady.
- FCPS prioritizes the security and integrity of our IT systems to safeguard against cyber threats and
 unauthorized access. A multi-layered approach ensures that data collection, review, transmission, and
 storage are conducted with the utmost care and protection through advanced technologies, strict
 access controls, regular audits, and comprehensive training. FCPS strives to maintain the highest data
 security and privacy standards across the organization.
 - DIT utilizes industry data encryption methods to ensure that any information transmitted across our networks remains inaccessible to unauthorized individuals.
 - In March 2024, DIT finished acquiring and implementing a modern security email platform that provides substantial new data safeguards, protecting staff email inboxes from phishing scams and enabling Data Loss Prevention (DLP). These platforms block malicious emails by identifying phishing attempts and malware and detecting and halting known threats across our Microsoft and Google email environments.

Summary of Detections Since March 2024			
Туре	Number of Messages	Percent	
Blocked: Others	204,712,200	51.93%	
Accepted	98,625,192	25.02%	
Blocked: PDR	46,159,057	11.71%	
Blocked: Spam	22,761,356	5.77%	
Blocked: Email Firewall	20,943,738	5.31%	
Blocked: Invalid Recipients	925,572	0.23%	
Blocked: Anti-Virus	40,988	0.01%	
Blocked: Regulatory Compliance	22	0%	
Total	394,168,125	100%	

- o Internal access audits to core student and Human Resources systems are conducted every fiscal year to ensure that only authorized staff have continued access to protected data.
- FCPS implements multiple controls and monitoring tools to limit data oversharing and protect sensitive files across all storage platforms.
 - FCPS enforces multi-factor authentication (MFA) for key systems. DIT implemented stronger MFA in SY 2023-24 and supported change management associated with shifting 40,000 staff to the new MFA methods.
 - The DIT privacy team evaluates every instructional tool to ensure vendors' terms of service do not violate student or staff privacy requirements.
 - DIT is upgrading our Identity Management System to leverage modern security and access control across all key systems. This supports DIT's long term goal to move towards a zero-trust environment. Anticipated upgrades will be implemented by the end of SY 2024-25.

5. Establish appropriate boundaries and ethical guidelines for the use of artificial intelligence in educational and operational settings.

Newly Added or Updated Evidence for Indicator 5:

- A cross departmental team has established appropriate boundaries and ethical guidelines for artificial intelligence (AI) use in FCPS, ensuring that AI serves as a tool to enhance human capabilities and promote equitable learning opportunities for all students.
 - Resources and Guidance: Resources have been developed to provide clear boundaries and
 expectations for student and staff use of AI. The Student Rights and Responsibilities and
 Acceptable Use Policy now include specific language addressing AI, such as updating the
 definitions of scholastic dishonesty and generative AI. Additionally, sample syllabus language
 has been developed to help middle and high school teachers communicate expectations around
 AI to their students.

- Professional Development and Training: Comprehensive AI training has been offered through various channels. Sessions at the Leadership Kickoff Week in July 2024 helped leaders to understand how to approach AI as well as resources available to them. Some schools held sessions for teachers to support responsible AI implementation, emphasizing the importance of keeping humans in control of decisions, leveraging AI tools ethically and responsibly, and intentionally enhancing the use of AI tools.
- Curriculum Integration: Two AI lessons have been embedded in the high school advisory curriculum to empower students to become responsible users of AI. These lessons focus on the Student AI Guide and explore ethical dilemmas related to AI use in education. This proactive approach equips students with the knowledge and critical thinking skills necessary to navigate the ethical landscape of AI.
- Fostering Innovation and Collaboration: To promote responsible AI innovation within schools, ISD and DIT launched the AI Innovator Cohort, a collaborative learning experience in SY 2023-24 with over 200 educators from 95 different FCPS schools participating. The SY 2024-25 cohort includes 101 participants across 49 schools. The cohort provides a platform for educators to explore AI tools, share best practices, and develop innovative projects. The 2023-24 AI Innovator Share Fair celebrated achievements, showcasing projects focused on how AI transforms our approach to education.
 - Many teachers in last year's cohort used AI to support Universal Design for Learning (UDL) principles and accessibility. This is being built upon with this year's group and we have added ways to deepen instruction.
- Digital Ecosystem Enhancement: Al tools are being added to the digital ecosystem. Tools within
 the ecosystem that have Al embedded include Canva, Pear Deck, Adobe Express, and Lucid
 Spark. ISD staff are piloting Al tools to improve student learning and teacher productivity.
 Examples include a tool that helps support teachers as they grade student writing and a tool
 that supports students in developing mathematical understanding.
- DIT staff carefully evaluates available AI functionality in tools that FCPS already owns or operates.
 Once validated, the tools are made accessible to the appropriate FCPS staff. In fall 2004, DIT piloted and subsequently deployed Google Gemini AI via the FCPS secured Google environment for all FCPS staff as an approved tool to use for work. In November 2024, FCPS deployed the Zoom AI 2.0 feature to all full-time FCPS staff.
 - Zoom's Al Meeting Summaries highlight the platform's advanced capabilities in streamlining post-meeting workflows, saving hours for the meeting organizer in documenting and sharing meeting minutes.
 - Additionally, there are some early use cases of a teacher's ability to use Zoom AI transcription to provide classroom notes to all students, supporting UDL.

FCPS Zoom Usage (January 2024 - November 2024)		
Meetings Hosted - Central Office 140,860		
Meetings Hosted - School-Based	91,410	
Meeting Participants 1,983,988		
Al Meeting Summaries	3,592	

• In fall 2024, DIT piloted and subsequently deployed Google Gemini AI via the FCPS secured Google environment for all FCPS staff as an approved tool to use for work.

Continuing Evidence for Indicator 5:

- FCPS follows <u>VDOE Guidelines for AI Integration Throughout Education in the Commonwealth of Virginia</u> which outlines AI policy and Information Technology standards for the classroom.
- DIT and the Instructional Services Department (ISD) teams are actively training FCPS staff on basic Al
 Literacy using publically available AI tools while emphasizing the importance of safeguarding private
 information. During this school year, FCPS teams from DIT, ISD, and the Office of Professional
 Learning (OPL) have hosted multiple information-sharing sessions for Division staff and provided
 synchronous and asynchronous professional development opportunities. This training has been
 delivered through multiple channels:
 - Direct training to all School Based Technology Specialists (SBTS), who then train staff at their respective schools.
 - Central office training sessions for various groups, including transportation leadership, facilities, administrative assistants, and executive principals.
 - o An asynchronous course available in MyPDE for all staff.
 - The January 2024 DIT mid-year AI conference attracted over 800 employees, providing them with opportunities to interact with industry luminaries hosting idea sharing sessions.
- Student web filters continue to block access to public AI tools on FCPS student computers and network, ensuring compliance with privacy regulations and protecting student data.
- 6. Provide the training, tools, and accessibility resources for appropriate staff to support the instructional needs and inclusion of all learners.

Newly Added or Updated Evidence for Indicator 6:

- The instructional software review process has been updated to include criteria from the <u>ISTE Teacher Ready Evaluation Tool</u>. This tool supports the selection of the most high-quality, impactful tools for teaching and learning.
- Throughout the past three school years, the Educational Technology Team in ISD has equipped SBTS to implement UDL. The July 2024 SBTS Kick Off focused on how technology can support UDL.
- A group of 21 SBTS and central office staff members are currently working towards ISTE Educator Certification. This certification focuses on improving instructional practice supported by technology in ways that lead to Portrait of a Graduate skills for students.
- Curriculum developed and adopted by ISD is vetted for accessibility prior to being published for staff and students.
 - Accessibility and copyright training that focuses on how to ensure that content created as part of Summer Curriculum Development (SCD) is accessible to learners as well as meets copyright requirements is included in summer curriculum development projects sponsored by ISD.

Continuing Evidence for Indicator 6:

 Assistive Technology Services (ATS) uses technology, such as communication devices, apps, extensions, hardware, software, mobility devices, etc. to maximize the potential of FCPS students with disabilities. ATS staff members work in collaboration with school teams to ensure that all students who require assistive technology have the technology tools and training necessary to access the curriculum, narrow the achievement gap, gain essential life skills, and reach their full potential.

- FCPS staffs 32 Assistive Technology Coaches across the Division who work with school teams to incorporate Assistive Technology for Students with Disabilities.
- Approximately 3,000 Pre-K-12 students have accommodations on an IEP or 504 requiring Assistive Technology.
- FCPS provides speech-generating devices (SGDs) for augmentative and alternative communication to over 1,600 students to meet their individual learning needs.
- All FCPS students have access to technology supports, such as voice dictation, with their FCPSOn device, not just those with IEPs and 504 plans. Students and teachers may select when to use these tools as a part of the Tier 1 instructional program.
- <u>Augmentative and Alternative Communication</u> (AAC) uses a variety of techniques and tools, to help the
 individual express thoughts, wants and needs, feelings, and ideas. AAC is augmentative when used to
 supplement existing speech, and alternative when used in place of absent or not functional speech.
- DIT provides specialized equipment for unique student needs in partnership with the assistive technology team to ensure students' needs are accounted for in support of equitable learning.
- ATS and the DSS Accessibility Specialist have provided accessibility guidance and resources on the FCPS public website and Employee Hub intranet site, including, but not limited to: <u>Web Accessibility</u> <u>Guidelines</u>, <u>Technology Tools to Support All Learners</u>, and <u>Accessibility in FCPS</u>, and <u>Accessible</u> <u>Educational Materials (AEM)</u>.
- Divisionwide training has been framed within the <u>Choose Accessible Learning Materials (C.A.L.M.)</u> initiative as a way to ensure accessibility for all students and support the FCPS commitment to <u>Universal Design for Learning</u>. Training to implement accessibility best practices is provided centrally.
- The DSS Accessibility Specialist supports the vetting of electronic instructional resources as a
 participant in IT approval processes by providing guidance on embedded accessibility features that can
 meet broad accessibility needs of students and staff.
- DIT collaborated with school-based teams to implement <u>Lightspeed Classroom Management</u>, a
 classroom management application that helps teachers effectively manage classrooms with real-time
 visibility of student laptop screens and actions, control over students' FCPS devices to limit distractions
 and push out vetted instructional links and resources directly to students' FCPS devices. To address
 VDOE concerns about test security on state assessments when staff has access to desktop monitoring
 software, DIT and CAO staff published guidance and protocols for school staff to ensure proper
 precautions during test sessions.
- 7. Ensure staff and students are provided with training and support to effectively, ethically, and safely use technology tools and resources provided by the Division and engage with these resources as digital citizens.

Newly Added or Updated Evidence for Indicator 7:

 During SY 2023-24, 15 FCPS schools earned Common Sense Recognition, a certification awarded to schools that demonstrate they have provided digital citizenship professional development to staff, taught a required number of digital citizenship lessons to students, and expanded family awareness of digital citizenship. Central team members continue to support schools in earning Common Sense Recognition.

- The DIT Upskilling Academy is dedicated to fostering continuous learning and professional growth
 within FCPS IT and empower staff with the advanced skills and knowledge essential for implementing
 modern technologies. The program is built on the leading technology learning platform, Coursera.
 Coursera has updated learning content from all major technology companies and many leading
 universities.
 - The DIT Upskilling Academy Program provides IT employees and some technology-adjacent colleagues full access to Coursera's extensive course library. To date, over 521 employees have joined the program, enrolling in 676 courses in 2023 and 762 courses in 2024. The primary areas of focus for employees include Customer Service, Google Workspace Administration, and Cybersecurity.
 - The IT Mentoring Program offers mentorship in key areas such as Cloud Services, Endpoint Configuration, IT FASTeam, IT Support, Cybersecurity, Networking, and Broadcasting and Streaming. By the end of the current fall cohort, over 113 mentees will have participated in the program.
 - The FCPS DIT Career Academy for Students, created in collaboration with Coursera in April 2023, offers up to 1,000 FCPS high school students a valuable learning opportunity, including access to entry-level certificates through the Coursera Career Academy.
 - To date, 838 student learners have participated, enrolling in 1,051 courses. The primary focus areas for students are Data Science, Cybersecurity, and Business, which have collectively generated 5,474 learning hours.

Continuing Evidence for Indicator 7

- FCPS ensures staff and students receive thorough training and support to adeptly, ethically, and safely
 utilize Division-provided technology tools and resources, fostering engagement as responsible digital
 citizens. This encompasses structured training programs tailored to different user groups, ongoing
 professional development sessions, readily accessible help resources, and clear ethical and safe
 technology use guidelines.
 - FCPS utilizes Common Sense Education's Digital Citizenship Lesson Collection to support the development of student skills and dispositions around safe, ethical, and responsible technology use. These lessons are integrated into content curriculum, and some are used during advisory periods in middle and high school or morning meetings for elementary school students. Required sessions for middle and high school focus on topics such as understanding digital citizenship, digital footprints, proper use of AI, and time management strategies with digital resources. These skills are further reinforced in the context of FCPS Portrait of a Graduate.
 - Student Tools and Technology provides information to parents and students about laptops and tablets, device expectations, parental consent to use digital resources, device activity reports for parents, password recovery, technology support, and establishing expectations for technology use at home.
 - Student Device Responsible Use Guidelines outlines the best practices for taking care of student FCPS devices, processes for obtaining an FCPS device, and reporting a lost or stolen FCPS device.
 - School Based Technology Specialists (SBTS) are trained on the <u>International Society for</u>
 <u>Technology in Education (ISTE) Standards For Students</u> so they can support staff in developing
 these important skills with students.

- Staff are offered a variety of webinar and face-to-face opportunities to learn about our digital ecosystem tools and use technology to impact student learning through Google Certified Educator Cohorts, Academy Courses, and Ed Tech learning opportunities held after school, as well as training offered by each school's SBTS.
- Every employee must complete annual cybersecurity training called "Cybersecurity Awareness in Education" (via MyPDE). As of January 10, 2025, 97.3% of full time employees have completed this training.
- FCPS promotes <u>Digital Citizenship education</u> through interactive workshops, curriculum integration, and awareness campaigns, emphasizing the importance of responsible online behavior, privacy protection, and cybersecurity awareness for all employees and students.
- Staff also have several options for learning about effective and ethical uses of AI, including but not limited to: an asynchronous MyPDE course, face-to-face sessions, ongoing Socratic dialogues, and choice boards of resources for additional learning and exploration.
- 8. Deliver transparent information for families about the purpose and frequency of technology use in the classroom and the Division.

Newly Added or Updated Evidence for Indicator 8:

The <u>Lightspeed Parent Portal</u> allows families to be connected and engaged with student learning by
providing access for families to view student internet activity when using FCPS issued devices. The
portal also enables families to control the internet connectivity on FCPS devices outside of the school
hours ensuring each household is able to align student device usage as they deem necessary.

Lightspeed Parent Monitoring Accounts	
SY 2023-24	SY 2024-25 (as of November 2024)
7,878	10,281

 Parents can review instructional digital resources utilized in FCPS classrooms for Instructional Purpose, Parental Permission, Privacy and Conditions of Use, and Account and Access Details through the FCPS Digital Ecosystem Library. Furthermore, FCPS requires parental consent to use online tools, ensuring transparency and compliance with privacy regulations.

Continuing Evidence for Indicator 8:

- FCPS is committed to keeping families informed about how technology is used in our classrooms and throughout the Division.
 - The <u>Technology Support for Families page</u> provides information on resetting passwords on platforms such as Google, Schoology, ParentVUE, Lightspeed parent reports, and Zoom.
 - Parents are kept informed about how programs such as STMath, Mathspace, and Lexia are used in the classroom and at home.
 - In SY 2023-24 and SY 2024-25, elementary schools were provided with slides about STMath that could be used during Back to School Night to help families understand what this program is and how it can be used to support student learning.
 - Webinars for families about STMath and Mathspace have been conducted for the past four school years.

- Lexia Parent Night Sessions are being held throughout SY 2024-25 (a total of 7 virtual event) to provide parents with an overview of what Lexia is and how Lexia is being used in FCPS.
- Regulation 3207: Classroom Use of Schoology outlines the requirements for Schoology usage, including creating and communicating guidelines for use of Schoology within the school and updating Schoology on at least a weekly basis.