

Instructional Technology Plan 2022-2025



**Geneva City School District
400 W. North Street
Geneva, NY 14456**

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Strategic Technology Planning

District Mission

The mission of the Geneva City School District is to educate and graduate all students with the essential skills and knowledge to live lives of consequence.

Instructional Technology Vision

Geneva City School District utilizes innovative technology to support and enhance teaching and learning. We leverage technology in order to provide enriching and authentic learning experiences to prepare students to be successful in a diverse and changing world.

- We believe technology allows us to better serve the diverse learning needs of our students.
- We believe multiple forms of technology will provide a rigorous and engaging learning environment for all students.
- We believe all students need access to current technology to have the necessary skills to succeed in our diverse and changing world.
- We believe that the school community must receive ongoing professional learning to effectively prepare quality instruction for all students.

Instructional Technology Planning Process

The instructional technology committee meets monthly throughout the school year, and specifically, from December 2021-June 2022, we developed the district's comprehensive instructional technology plan. This committee started by revising the instructional technology vision to ensure it aligned with the district's overall mission and vision and identifying core beliefs that will drive the multi-year plan forward. Analyzing data and district/building level plans assisted in identifying focus goals.

Stakeholder Participation:

Assistant Superintendent of Administrative Services
Assistant Superintendent of Teaching, Learning and Accountability
District Technology Integrator
WIN/MTSS Coach
Kindergarten Teacher
1st Grade Teacher
2nd Grade Teacher
2nd Grade Teacher
Middle School Teaching Assistant
High School Art Teacher
High School Library Media Specialist
Parents

Our previous technology plan was directly aligned to our personalized learning initiative in the district. We implemented a 1:1 device rollout for all students in the Geneva City School District through the personalized learning initiative. Our focus on personalized learning allowed us to

- reach all students through the use of data and targeted instruction
- align personalized learning vision and instructional practices with our new reading curriculum resources across all PK-5 classes
- increase teacher buy-in and culture of initiative practice and engage reluctant teachers while recognizing and sharing successes.

Building upon and continuing the previous technology plan, the instructional technology committee reviewed multiple data points to identify areas of strength and improvement related to instructional technology for the Geneva City School District. We believe that instructional technology is one element of personalized learning. As a district, we need to focus on our students' skills to succeed when using technology and preparing for college or careers. In preparing our students for their future while using technology, our teachers must feel confident in the tools and resources when creating engaging and collaborative lessons.

Instructional Technology COVID Pandemic Experiences

The COVID pandemic has provided opportunities for teachers to integrate technology into their lessons through a blended learning model. Through this, we will ensure teachers have the necessary skills to effectively teach students in a blended learning model using instructional technology by providing various professional learning opportunities. These offerings included teaching in a hybrid model, the components of Seesaw and Schoology, the use of Google for collaboration, parent communication tools like Parent Square, and additional instructional technology tools and resources that the district purchases and has approved for teacher and student use. Due to the pandemic, our devices 2-12 have been going home nightly, and we have provided internet access to eligible and in-need families.

A collaborative team of teachers developed a technology hub for parents that includes videos and resources for all our technology tools such as ParentSquare, McGraw Hill, iReady, Schoology, and Google. This information is posted on our website under the COVID-19 tab for families to continue to access. Additionally, this team developed a resource for all staff and students that provides detailed overviews of all instructional tools that can be utilized in the classroom to support instruction. We will continue developing and updating these resources to reflect new technology tools purchased and used by the district for all stakeholder groups.

Instructional Technology Professional Development Plan

The Geneva City School District is pleased to offer various professional development opportunities throughout the year that are aligned with the district and building goals. The Geneva City School District Professional Learning Plan identifies that we will facilitate and support district-approved instructional technology tools to enhance student engagement and maximize classroom instruction. Professional learning opportunities include Schoology, Seesaw, GoGuardian, flexible content and tools, 1:1 classroom management, and differentiated learning are offered to faculty and staff in various delivery methods. Through an extensive technology audit and ongoing professional development survey feedback, the district has a clear picture and understanding of the current state of the educator in the district as it relates to instructional technology. The instructional coaching team leads professional development opportunities. The coaches, filling many different roles, focus primarily on supporting students by working directly with our faculty and staff on the implementation and alignment of district initiatives. The coaching team can be found in classrooms co-teaching with colleagues, learning professional development sessions, and leading or attending committee meetings. One coaching team member is a district-wide technology integrator that supports integrating technology in the classroom. All professional development sessions provided to staff have an accompanying survey to identify the session's effectiveness and to what extent the participants met the learning targets. Based on the data, all professional development sessions are reviewed and altered to meet the needs of all educators in Geneva City Schools.

Instructional Technology Plan Metrics

The district's use of instructional technology will serve as a part of a comprehensive and sustained effort to support rigorous academic standards attainment and performance improvement for students. The district believes instructional technology is a critical component of providing multiple modes of

instruction to students that will prepare them for their future in a diverse and changing world. We believe that providing students with multiple instructional formats (small group, independent, and whole group) that infuse technology will increase student academic growth. The district will utilize instructional technology to support differentiated student learning, provide targeted instruction, assist with analyzing data to make informed instructional decisions, and provide students opportunities to reflect on their learning and take ownership.

Through the teacher observation process directly aligned to the Danielson Rubric and stakeholder surveys that will be administered and analyzed, we will be able to make data-driven decisions that improve learning outcomes.

Goal Attainment: *The District is asked to outline the extent to which they have achieved, at the local level, goals put forth in the 2010 Statewide Learning Technology Plan.*

1. Digital Content – The District uses standards-based, accessible digital content that supports all curricula for all learners. The district has met this goal moderately.
2. Digital Use – The District’s learners, teachers, and administrators are proficient in the use of technology for learning. The district has met this goal moderately.
3. Digital Capacity and Access – The District’s technology infrastructure supports learning and teaching in all of the District’s environments. The district has met this goal significantly.
4. Leadership – The District Instructional Technology Plan is in alignment with the Statewide Learning Technology Plan vision. The district has met this goal fully.
5. Accountability – District-level information is posted on the District website, is easy to access, and is easily understood. Information provided includes the results achieved by the District in their efforts to enable students to build knowledge, master skills, and grasp opportunities for a better life. The district has met this goal significantly.

Proposed Goals for 2022-2025

1. To provide all educators with the knowledge and support with technology integration to ensure a rigorous teaching and engaging curriculum that meets the needs of all learners and prepares students for the global community.
2. To provide the school community with the knowledge and support to identify and implement a safe and secure online learning culture.
3. Develop, communicate, and implement technology systems to ensure consistency across the school district.
4. Strengthen our network to ensure sufficient, reliable high-speed connectivity for learners, educators, and leaders.

Instructional Technology Action Plan for Goal 1

To provide all educators with the knowledge and support with technology integration to ensure a rigorous teaching and engaging curriculum that meets the needs of all learners and prepares students for the global community.

NYSED Goal Alignment

- Develop a strategic vision and goals to support student achievement and engagement through the seamless integration of technology into teaching and learning
- Provide technology-enhanced, culturally- and linguistically-responsive learning environments to support improved teaching and learning
- Increase equitable access to high-quality digital resources and standards-based, technology-rich learning experiences
- Provide access to relevant and rigorous professional development to ensure educators and leaders are proficient in the integration of learning technologies

Target Population

- All students
- Teachers/Teacher Aides
- Administrators
- Technology Integration Specialists

How will this instructional technology goal be measured and evaluated?

- Surveys will be administered after each professional development session. Survey data will be analyzed to determine participants' level of knowledge of the topic and allow the district to plan future professional learning opportunities.
- Data collected through the teacher observation is directly connected to the Danielson Rubric, specifically 2e. Principals will analyze the data collected to identify areas of need for their staff, and professional learning opportunities will be offered.
- Technology-enhanced, culturally and linguistically responsive learning experiences are embedded into the curriculum for all content areas. We will collect data aligned specially to the use of technology, and the experiences students engage in through ongoing learning walks.
- This goal will be accomplished when all staff have the knowledge and skills to integrate technology into their curriculum, a thorough understanding of computer science and digital fluency standards, and technology experiences embedded into all curriculum.

Action Step Category	Action Step Description	Responsible Stakeholder	Anticipated Date of Completion
Curriculum	Unpack Computer Science and Digital Fluency Learning Standards	Assistant Superintendent of Teaching, Learning and Accountability	June 2023
Professional Development	Topics that cover integrating technology into standards-based engaging lessons	Instructional Technology Coach	June 2023
Purchase Implementation	Purchase a typing software for students in	Director of Technology	June 2023

	grades 2-12 to ensure students have the necessary typing skills for CPT, school work, and their future.		
Planning	Audit the current course offerings to determine what courses are available in digital communication in the hopes of expanding offerings.	Building Principal Counselor Technology Teacher	June 2023
Curriculum	Construct a Geneva City School District PK-12 Digital Literacy Scope and Sequence Document that outlines students' necessary skills at each grade level.	Assistant Superintendent of Teaching, Learning and Accountability	June 2024
Professional Development	Providing awareness training to staff on the Computer Science and Digital Literacy Standards and ISTE standards	Instructional Technology Coach	June 2024
Professional Development	Continued PD that is differentiated for staff at Geneva to support the instructional delivery model and integration of technology	Instructional Technology Coach	June 2025
Curriculum	Complete a crosswalk between the Computer Science and Digital Fluency Learning Standards and the current grade level curriculums to identify areas of gaps.	Assistant Superintendent of Teaching, Learning and Accountability	June 2025
Curriculum	Embed technology standards and technology-enhanced, culturally- and linguistically-responsive learning experiences into the current grade level curriculum.	Assistant Superintendent of Teaching, Learning and Accountability	June 2025

Instructional Technology Action Plan for Goal 2

To provide the school community with the knowledge and support to identify and implement a safe and secure online learning culture.

NYSED Goal Alignment:

- Increase equitable access to high-quality digital resources and standards-based, technology-rich learning experiences
- Provide access to relevant and rigorous professional development to ensure educators and leaders are proficient in the integration of learning technologies

Target Population

- All students
- Teachers/Teacher Aides
- Administrators
- Parents/Guardians/Families/School Community
- Technology Integration Specialists

How will this instructional technology goal be measured and evaluated?

- Survey data will be collected from each professional development session. Data from these surveys will be analyzed to determine participants' level of knowledge of the topic and plan future professional learning opportunities.
- A student survey will be administered to provide a baseline of knowledge of safe and secure devices and internet use. The instructional technology committee will analyze this data to ensure students clearly understand their devices' safe and secure use for learning. Based on the data from the survey, lessons will be delivered to meet the needs of our student population.
- By developing and implementing a digital citizenship curriculum for all students, data collected from teacher observations during mini-lessons and assessment of student learning will be used to identify areas of need moving forward.
- We will use common sense media for academic lessons and evaluations related to creating a safe and secure learning environment. Data collected from teacher observations and assessments will be analyzed to identify areas of need for providing additional professional learning.
- This goal will be accomplished when the entire school community represents a safe and secure learning environment and the school community understands the expectations and models daily. Through ongoing learning walks, we will be able to collect and analyze data directly aligned with the school culture.

Action Step Category	Action Step Description	Responsible Stakeholder	Anticipated Date of Completion
Data Privacy	Ensure the District complies with Education Law 2D	Director of Technology	September 2022
Professional Development	Data security and privacy awareness training for staff.	Director of Technology	September 2022
Professional Development	Continued data security and privacy awareness training for staff.	Director of Technology	September 2023

Professional Development	Differentiated data security and privacy awareness training for staff.	Director of Technology	September 2024
Curriculum	Develop a Pk-12 digital citizenship curriculum	Director of Technology Assistant Superintendent of Teaching, Learning and Accountability Library Media Specialists	June 2024
Professional Development	Provide differentiated training on Go Guardian for all staff grades 2-12. Continue offering PD to new hires.	Instructional Technology Coach	June 2025
Curriculum	Implement a K-12 a digital citizenship curriculum	Director of Technology Assistant Superintendent of Teaching, Learning and Accountability LMS	June 2025

Instructional Technology Action Plan for Goal 3

Develop, communicate, and implement technology systems to ensure consistency across the school district.

NYSED Goal Alignment:

- Increase equitable access to high-quality digital resources and standards-based, technology-rich learning experiences
- Provide access to relevant and rigorous professional development to ensure educators and leaders are proficient in the integration of learning technologies

Target Population

- All students
- Teachers/Teacher Aides
- Administrators
- Parents/Guardians/Families/School Community
- Technology Integration Specialists

How will this instructional technology goal be measured and evaluated?

- Conducting a staff survey and an audit of technological systems will provide data for the technology department to analyze to understand if the school community understands the procedures put in place, resulting in consistency across the district.
- Data will be collected during observations aligned to the Danielson Rubric (2E) related to instructional technology. Building-level principals will analyze data collected to identify areas of need and provide additional learning opportunities and support.
- Exit tickets will be administered during New Teacher Orientation to all onboarding staff to assess their level of knowledge regarding the instructional technology tools learned. Data from the exit tickets will be analyzed to identify if teachers need additional training in specific areas.
- Policies and protocols will be communicated to staff in multiple formats, and evidence of those formats will be collected. Data will be collected on the number of teachers who use the protocols developed, for example, the software approval process.
- We will review all instructional technology tools for teacher usage yearly to determine the next steps with each tool.
- We will know this goal is accomplished through the data collected showing consistency across the district related to our technology systems and the use of instructional tools.

Action Step Category	Action Step Description	Responsible Stakeholder	Anticipated Date of Completion
Policy/Protocols	Develop software approval process	Director of Technology	Summer 2022
Communication	Communicate software approval process to all staff	Director of Technology	September 2022
Communications Policy/Protocols	Develop a system to communicate technology usage in the district with families. (Ex: During Open House, offer parent	Director of Technology Instructional technology coach	June 2023

	awareness of technology used in a child's school, Make parents aware of the technology resources on the GCSD website.)		
Planning Communication	Develop and share a technology handbook for all staff.	Director of Technology	June 2024, update yearly
Planning	Develop, implement, and maintain a device system district-wide. This system will include device replacement processes during the beginning, during, and end of the school year.	Director of Technology	Ongoing
Planning	Developing a process for onboarding and offboarding employees (CSEA, GTA, ISNU). This process must include access to professional development on technology tools.	Assistant Superintendent	Ongoing

Instructional Technology Action Plan for Goal 4

Strengthen our network to ensure sufficient, reliable high-speed connectivity for learners, educators, and leaders.

NYSED Goal Alignment:

- Design, implement, and sustain a robust, secure network to ensure sufficient, reliable high-speed connectivity for learners, educators, and leaders

Target Population

- All students
- Teachers/Teacher Aides
- Administrators
- Technology Integration Specialists

How will this instructional technology goal be measured and evaluated?

- Through the collection of help desk tickets regarding network and connectivity on a monthly basis.
- We will coordinate with EduTech to monitor and review recommendations for our infrastructure and connectivity to ensure we sustain a robust and secure network that is reliable for our learners, educators, and leaders.
- We will know this goal has been accomplished with all upgrades and replacements that have occurred.

Action Step Category	Action Step Description	Responsible Stakeholder	Timeline
Upgrade	Fiber between data closets at NSS	Assistant Superintendent	2022- 2023 School Year
Replacement	Switches and power supply in data closets District Wide	Assistant Superintendent	Spring 2023
Replacement	UPS in building data closets District Wide	Assistant Superintendent	Spring 2023
Upgrade	Wireless Access Points District Wide	Assistant Superintendent	Summer 2023
Replacement	District Servers at Data Center	Assistant Superintendent	Spring 2024
Replacement	Back-Up Tape Library at Data Center	Assistant Superintendent	Spring 2024

Upgrade	Fiber between Data Closets at WSS	Assistant Superintendent	2024-2025 School Year
Replacement	Core, devices and data center UPS at Data Center	Assistant Superintendent	2024-2025 School Year

NYSED Initiative Alignment

The Geneva City School District believes instructional technology is a critical component of providing multiple modes of instruction to students that will prepare them for their future in a diverse and changing world. We believe that providing students with multiple instructional formats (small group, independent, and whole group) that infuse technology will increase student academic growth. The district will utilize instructional technology to support differentiated student learning, provide targeted instruction, assist with analyzing data to make informed instructional decisions, and provide students opportunities to reflect on their learning and take ownership. Technology is integrated into teaching and learning to foster student engagement. When tools like iReady, iXL, Schoology, Seesaw, Raz-Plus, and EdPuzzle are integrated into the classroom environment, it can make a great difference in the growth of students. Teachers use technology daily during their instruction, from using the interactive whiteboards to providing differentiated lessons pushed out via our learning management systems. Students demonstrate their understanding through different modes of technology where teachers can instantly analyze their work and provide feedback. When using technology tools to monitor student response, teachers can inform their teaching practices and provide targeted learning opportunities to students.

The Geneva City School District plans to ensure all students have access to a touchscreen device with internet access in school and at home. We will determine which families need access to the internet and provide access for all families who qualify. We continue to monitor and update our infrastructure to ensure our school community has the best connectivity to support classroom instruction. Lastly, we will continue to offer staff professional learning opportunities to integrate technology into lessons and curricula. We will provide regional conference opportunities to staff interested in building technology literacy capacity within the school district to turnkey professional learning opportunities.

Instructional technology services and/or devices deemed necessary for instruction, materials, and assessments will be provided to students with disabilities. Assistive technology teams have been established to evaluate the students' assistive technology needs in an ongoing process. Geneva City School District and Wayne Finger Lakes BOCES work collaboratively to support assistive technology and provide differentiated instruction once its need has been determined through individual evaluation. Students with disabilities utilize assistive technology such as text-to-speech software, sound field systems, dictation, note-taking software, and visual support tools.

Supporting the Needs of Students with Disabilities

The Geneva City School District will utilize technology to address the needs of students with disabilities to ensure equitable access to instruction, materials, and assessments by doing the following:

- Class lesson plans, materials, and assignment instructions are available to students and families for "anytime, anywhere" access (such as through a class website or learning management system).
- Direct instruction is recorded and provided for students to access asynchronously (such as through a learning management system or private online video channel).
- Technology is used to provide additional ways to access key content, such as providing videos or other visuals to supplement verbal or written instruction or content.
- Text to speech and/or speech to text software is utilized to provide increased support for comprehension of written or verbal language.
- Assistive technology is utilized.
- Technology is used to increase options for students to demonstrate knowledge and skill.
- Learning games and other interactive software are used to supplement instruction.

Professional Development offered to teachers of students with disabilities will include the following:

- Technology to support writers in the elementary classroom
- Technology to support writers in the secondary classroom
- Research, writing and technology in a digital world
- Enhancing children's vocabulary development with technology
- Reading strategies through technology for students with disabilities

- Choosing assistive technology for instructional purposes in the special education classroom
- Using technology to differentiate instruction in the special education classroom
- Using technology as a way for students with disabilities to demonstrate their knowledge and skills
- Multiple ways of assessing student learning through technology
- Electronic communication and collaboration
- Promotion of model digital citizenship and responsibility
- Integrating technology and curriculum across core content areas
- Helping students with disabilities to connect with the world

Supporting the Needs of English Language Learners

The Geneva City School District will utilize technology to address the needs of English Language Learners to ensure equitable access to instruction, materials, and assessments by doing the following:

- Direct instruction is recorded and provided for students to access asynchronously (such as through a learning management system or private online video channel).
- Technology is used to provide additional ways to access key content, such as providing videos or other visuals to supplement verbal or written instruction or content.
- Text to speech and/or speech to text software is utilized to provide increased support for comprehension of written or verbal language.
- Technology is used to increase options for students to demonstrate knowledge and skill, such as through the creation of a product or recording of an oral response.
- Learning games and other interactive software are used to supplement instruction.

Professional Development offered to teachers of students with disabilities will include the following:

- Technology to support writers in the elementary classroom
- Technology to support writers in the secondary classroom
- Research, writing and technology in a digital world
- Writing and technology workshop for teachers
- Enhancing children's vocabulary development with technology
- Writer's workshop in the Bilingual classroom
- Reading strategies for English Language Learners
- Moving from learning letters to learning to read
- The power of technology to support language acquisition
- Using technology to differentiate instruction in the language classroom
- Multiple ways of assessing student learning through technology
- Electronic communication and collaboration
- Promotion of model digital citizenship and responsibility Integrating technology and curriculum across core content areas
- Helping students connect with the world

Supporting the Needs of Students Experiencing Homelessness and/or Housing Insecurity

The Geneva City School District will utilize technology to address the needs of students experiencing homelessness and/or housing insecurity to ensure equitable access to instruction, materials, and assessments by doing the following:

- McKinney-Vento information is prominently located on individual school websites, as well as the district website.
- If available, online enrollment is easily accessible, written in an understandable manner, available in multiple languages and accessible from a phone.
- Offer phone enrollment as an alternative to in person enrollment.
- Set enrollment forms to automatically provide the McKinney-Vento liaison with contact information for students who indicate possible homelessness and/or housing insecurity
- Create a survey to obtain information about students' living situations, contact information, access to internet and devices for all students in the enrollment processes so the district can communicate effectively and/evaluate their needs.

- Provide students experiencing homelessness and/or housing insecurity with tablets or laptops, mobile hotspots, prepaid cell phones, and other devices and connectivity.
- Provide students a way to protect and charge any devices they are provided with by the district.
- Replace devices that are damaged or stolen as needed.
- Assess readiness-to-use technology skills before disseminating devices to students experiencing homelessness and/or housing insecurity.
- Create individualized plans for providing access to technology and internet on a case-by-case basis for any student experiencing homelessness and/or housing insecurity.
- Have resources available to get families and students step-by-step instructions on how to setup and use their districts Learning Management System or website.
- Class lesson plans, materials, and assignment instructions are available to students and families.
- Direct instruction is recorded and provided for students to access asynchronously (such as through a learning management system, DVD, or private online video channel).
- Technology is used to provide additional ways to access key content, such as providing videos or other visuals to supplement verbal or written instruction or content.
- Conduct regular educational check ins with all students experiencing homelessness and/or housing insecurity and secure any help needed to keep up with course work.
- Adjust assignments/to be completed successfully using only the resources students have available.
- Create in-person and web-based tutoring programs spaces and/or live chats to assist with assignments and technology issues.
- Offer a technology support hotline during flexible hours.
- Make sure technology support is offered in multiple languages.

Culturally Responsive Instruction and Learning Environments

The Geneva City School District will utilize instructional technology to facilitate culturally-responsive instruction and learning environments by doing the following:

- The district uses instructional technology to strengthen relationships and connections with families to assist in building a culturally responsive learning environment to enhance student learning.
- The district uses instructional technology to facilitate classroom projects that involve the community.
- The district uses instructional technology to develop and organize coherent and relevant units, lessons, and learning tasks that build upon students' cultural backgrounds and experiences.
- The district uses instructional technology to assist in varying teaching approaches to accommodate diverse learning styles and language proficiencies.
- The district uses instructional technology to facilitate collaborative classroom projects among heterogeneous student groups.

Technology Team

Title	Full-Time Equivalent (FTE)
Director of Technology	1.0
Technology Integrator	1.0
Customer Service Representative	1.0
Application Support Services Assistant (ASSA)	1.0
Network Engineer II	.4
IT Technician II	.4
Computer Services Assistant (CSA)	.4

Operational Technology

Disaster Recovery Plan

The Geneva City School District Disaster Recovery Plan is a comprehensive statement that addresses the actions necessary before, during, and after an incident. The District depends heavily on technology and automated systems to perform daily tasks at both operational and academic levels. The continued operation of the District depends on management's awareness of potential disasters and their ability to adapt and minimize the disruptions of critical functions. The primary objective of the Disaster Recovery Plan is to protect the integrity of the data and recover successfully to a normal state of productivity. Preparedness will be the key ingredient to a successful and expeditious recovery.

Defining a Disaster in IT Operations

The context of a disaster in Informational Technology Operations can be defined as a disruption to data flow and workflow reliant on electronic processes. A disaster can be varying in scale from a single node to complete disruption of network equipment and applications at the network's core.

Risk Assessment (Physical and Logical)

Determining the potential causes of a disaster will provide management the insight into risk assessment and the proper course of action to return the organization to normal operations. How and what can be identified by determining the type of risk and the associated technology. The two types of risks can be categorized by physical assets and logical assets. It is important to note that data is of the highest level of importance.

Physical Risks:

Risk Assessment	Disaster Event	Scope of Impact
Fire	Computer Hardware Wiring Network Devices Local Software	Local Room to Building
Flooding	Computer Hardware Network Devices Local Software	Local Room to Building
Electrical Surge	Computer Hardware Wiring Network Devices Local Software	Local Building
Electrical Power Outage	Computer Hardware Network Devices	Building(s) to District
Vandalism	Local Equipment	Local Room to Building

Logical Risks:

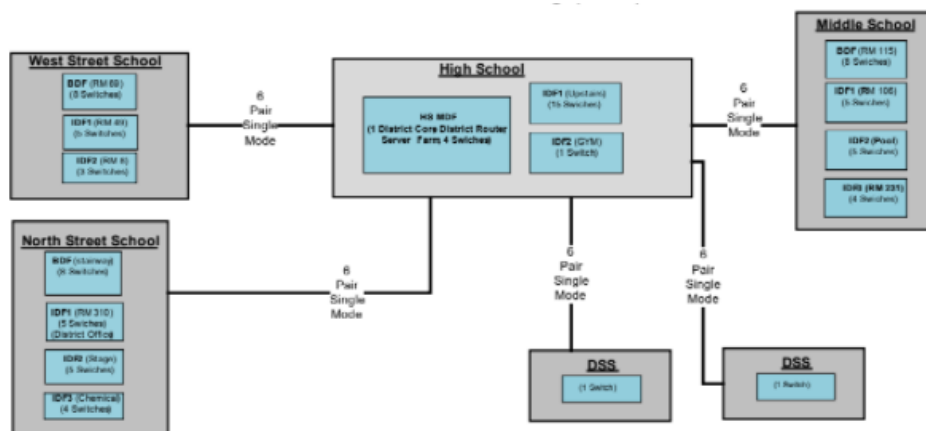
Risk Assessment	Disaster Event	Scope of Impact
Virus	Computer Hardware Servers	Single Node to District-Wide
Malware (Trojans, Adware, Spyware, Rootkits)	Computer Hardware Servers Software	Single Node
Hacking	Computer Hardware Servers Software	Single Node to District-Wide
Data Breach	Computers Mobile Computer Hardware Servers	Single Node to District-Wide

Overview of IT Operations

The IT Department maintains over twelve hundred nodes over the District’s data network. All users are provided with home folders that reside on a server. Users are given the right to the network according to their role in the District and operational commitments. All employees have email to communicate. The IT department (with support from Edutech) manages rights and policies through Microsoft Active Directory. Furthermore, the IT Department manages/supports telecommunications, remote access, wireless, cell phones, and camera and access security systems. All electronic data must travel over the Local Area Network (LAN), including Internet access to the World Wide Web. The District protects itself by using antivirus software on every node as well as a separate antivirus software with malware for the electronic mail server to provide for redundancy.

Physical Topology:

The LAN’s physical topology consists of six separate locations. The locations include; High School (HS), Middle School (MS), West Street School (WSS), North Street School (NSS) which includes the District Office, District Service Building (DSB), and the Press Box



Logical Topology:

The LAN's logical topology is an Extended Star Topology that consists of # subnets divided between the six locations in the District. All external systems that are connected to the network are virtually separated from the data network. An example of an external system would include the HVAC and security systems. All servers are centrally placed with the Core, main router and main switch. Each building's fiber trunk goes to a Main Distribution Facility (MDF). Fiber cable from the MDF's is then dispersed to the Intermediate Distribution Facilities (IDF). All fiber strands connect to switching in the data closets. All nodes are connected by a copper data cable to a switch.

The Wireless network was updated in 2017 with Meraki AC 805 which includes 251 Access Points, 8 SSIDS, one public with on demand availability, cloud based controller. Edutech manages and supports the Meraki network. The following SSIDS are active in the district:

1. HSWireless2
2. NSWireless2
3. WSWireless2
4. MSWireless2
5. GCS-Chromebooks
6. GCS-Chromebooks(NS\WS)
7. GCSD
8. GCS-Guest

All SSIDS are active throughout the district to allow for connectivity for faculty and staff.

Data Center:

The District operates a data center on the ground floor of the High School in room 132 called the Network Operating Center (NOC). The NOC houses the central core, router, and servers. The NOC is the designated disaster recovery site. Only IT staff have access to the server room via key card access.

Geneva City Schools Server Information:

Server Name	Applications
GCS-APPS	District Application Server
GCS-CALLACCT	Mitel Phones
GCS-DOCSTAR	Eclipse-DocStar server
GCS-GHOST	Ghost Imaging server & IT Dept data storage
GCS-IMC	Switch management
GCS-KMS	Microsoft Key Management Server
GCS-M3	Mandarin
GCS-EXCHANGE	Exchange 2016
GCS- MITELTFTP	Mitel Phones
GCS-NK	NutriKids
GCS-PDQ	PDQ Inventory and PDQ Deploy
GCS-PRINT	Printer Server
GCS-SQL	Microsoft SQL Database Server
GCS-TRACKIT	TrackIT

GCS-VCENTER	Virtual Center - Tape Backup
GCS-VTRANS	Versatrans
GCS-ST-DB	SchoolTool
GCS-ST-REPORT	SchoolTool
GCS-ST-WEB	SchoolTool
GCS-USERS Users	Home folder server
GCS-VIRUS	WSUS and Symantec Antivirus Distribution
VCENTER6	VMWare VCenter control server
ESX1	ESX1 -VMWare Host
ESX2	ESX2 -VMWare Host
ESX3	ESX3 -VMWare Host
GCS-DHCP	DHCP Server
GCS-AV	Antivirus Server
GCS-MAS	Mitel
GCS_MBC	Mitel
GCS-MCD	Mitel
GCS-RoDC	Read-only Domain Controller
GCS-MAC	JAMF MDM Server

Data Management:

All data is saved on the District’s servers. This would include data from primary operations and instructional applications, shared inter-office drives, and home folders. Most employees have privileges to save information on their local hard drives. However, this is discouraged due to the increase of data loss if that machine experiences a problem. All vital information is saved on the servers and is backed-up nightly. Currently, the only data not backed up is the data for the HVAC system and the security access server. If the HVAC system computer malfunctions, the HVAC system will still be operational manually. In the event the security access server malfunctions, the building’s access control units will still be operational and maintain appropriate access to doors while the security access server is repaired.

Software:

The following software is vital to the daily operations of the Geneva City School District:

Software	Purpose	Type	Storage Location
SchoolTool	Student Data (Demo, Enrollment)	Operations	GCS-ST-DB, GCS-ST-REPORT, GCS-ST-WEB
IEP Direct	Student SPED Data (Programs)	Operations	Boces Supported
NVision	District’s Finance System	Operations	Boces Supported
Versatrans	District’s Transportation Manager	Operations	GCS-VTRANS
Nutrikids	Poverty Data/POS/Food	Operations	GCS-NK

	Planning		
MS Exchange	Electronic Mail	Operations	GCS-EXCHANGE

Back-up and Storage:

The Geneva City School District utilizes the HP MSL 6030 Ultrium960 Drive Tape Library system that is controlled using Veritas Backup Exec. Software. All servers are backed-up every night. The Geneva5 Tech Utility Server is backed up once a month. The IT Department utilizes the following back-up protocol:

Daily: Data is backed-up incrementally each night. Incremental back-up is defined as any file that has been modified that day is backed-up. The daily backup is stored on a disk to disk at another location; this enables the IT Department to restore files quickly.

Weekly: A full backup occurs each week to ensure all data is captured for that week. The weekly occurs each Friday night and is stored on a disk to disk at another location. On every Saturday the weekly data is copied from disk to disk to tape to provide an archive solution. The data on the disk to disk is kept for 7 days, at which time it is overwritten by the next weekly data. The tapes are protected from being overwritten for 4 weeks.

Monthly: The last Friday of every month, a monthly backup occurs and is stored on a disk to disk at another location. On that Saturday, a copy of the monthly data is copied to provide an archive solution. The data on the disk to disk is kept for 7 days, at which time it is overwritten by the next weekly data. The tapes are protected from being overwritten for 12 months, and kept at another location.

Yearly: The last Friday of July, a yearly backup occurs and is stored on a disk to disk at another location. On that Saturday, a copy of the yearly data is copied to provide an archive solution. The data on the disk to disk is kept for 7 days, at which time it is overwritten by the next weekly data. The tapes are protected from being overwritten forever, and kept at another location.

BOCES also provides back-up services for School Master and Finance Manager Data daily for the Geneva City School District.

Scope:

This Disaster Recovery Plan outlines the overall district response to potential disaster problems in three areas.

1. Risk Reduction efforts focus on identifying mission critical district business processes and systems, (as related to technology services dept.) potential disaster related problems within those systems, and steps taken to mitigate those problems
2. Response involves measures to address Disaster problems that arise and ensure that mission critical district business activities are carried out. Response efforts take place to alleviate damage, loss and hardship associated with Disaster problems and to ensure district continuity of operations.
3. Recovery efforts include short and long-term strategies to permanently correct identified Disaster problems after the occurrence, and any necessary actions to mitigate impacts on district business operations.

Planning Assumptions

This Recovery/Contingency Plan relies on certain planning assumptions. These assumptions may change as new information and solutions develop. New assumptions may have to be made as the result of new information relative to the impact of a disaster becomes known and the plan will need to be modified appropriately. Current planning assumptions are as follows:

Internal Assumptions:

- The district has completed an assessment of district computer hardware and software.
- District computer systems identified as High Priority mission critical systems will be
- Disaster compliant and tested.
- Some top and high priority mission critical computer systems may experience unanticipated errors or failure due to the complexities and dependencies of the remediation and testing requirements.
- It may not be possible to ensure that external computer systems which interface with district computers are compliant. District systems could be impacted by bad data and system failures from other organizations.

External Assumptions

- There may be disruptions in utility services, including electric, gas, telecommunications, gas, water and cable.
- Employees may face problems at home or within their community, which impact their ability to work.
- Vendors, county and local governments, and other state agencies that the district normally deals with may experience disruptions of system failures which could impact mission critical district operations.

Risk Reduction

The IT Department will test all mission critical devices. These devices include servers and the data center's main UPS. Systems are continuously monitored. Any server log indicating a discrepancy will be investigated. Faculty and staff have received training regarding cybersecurity best practices and potential threats to personal private sensitive information (PPSI). A password change policy is enabled for all users every 180 days which requires a capital letter, number, and eight characters.

Response

The initial response to computerized systems to restore operations will take the approach of stages and priority.

The priority is:

- 1- Safety
- 2- Network Capacity and Telecommunications
- 3- Business function (payroll and purchasing)
- 4- Bus Routing and Food Service
- 6- Environmental and Security Controls
- 5- Instruction

All other applications will come back online in a timely manner depending on resources and capacity. When an incident occurs the Assistant Superintendent of Administrative Services must be notified immediately. The IT Department, together with the assistance from Edutech and the Geneva Central Office Administrators, will then decide the extent to which the Disaster Recovery Plan must be invoked. Responsibilities include:

- Respond immediately to a potential disaster and calling emergency services;
- Assess the extent of the disaster and its impact on the school district, data center, network, hardware, etc.;
- Decide on actions necessary to facilitate recovery and allocate responsibilities and activities as required;
- Establish and manage disaster recovery team to maintain priority services and resume normal operations;
- Ensure employees and community are notified.

Recovery

The district has identified personnel and resources that will be critical to the District's response to Disaster related problems.

- Assistant Superintendent of Administrative Services: Stephen Kruger
- Director of Technology:
- Network Analyst:
- Computer Technician:
- Help Desk Coordinator: Beth Dinkel
- Building System Maintenance:
- Business Manager:
- Superintendent:

Resources

District resources critical to support district Disaster response operations include:

- Alternate or standby computer equipment
- System diagnostic equipment and programs
- Key support vendors - Edutech
- Inhabitable Building / Facility Space
- Communications equipment: cell phones
- Off-site tape backup rotation

Coordinating Agencies

The following agencies will provide support to the District:

- 1- BOCES: Application support, server space, network technicians, secondary back-up recovery, Internet
- 2- Day Automations: HVAC, Security/Cameras
- 3- Geneva Police Department: Investigations if criminal activity involved)
- 4- Phones/Faxes: Verizon, Spectrum, Frontrunner

Investment Plan

Infrastructure Planning

The District will maintain an infrastructure replacement plan to ensure all operations and instructional activities can be supported. This plan will optimize available funding sources to maintain budgetary integrity.

Action	Description	Building	Timeline	Cost
Upgrade	Fiber between data closets	NSS	2022- 2023 School Year	\$43,000 (E-Rate)
Replacement	Switches and power supply in data closets	District Wide	Spring 2023	\$119,918 (E-Rate)
Replacement	UPS in building data closets	District Wide	Spring 2023	\$60,000 (E-Rate)
Upgrade	Wireless Access Points	District Wide	Summer 2023	\$272,000 (SMART Schools)
Replacement	District Servers	Data Center	Spring 2024	\$30,000 (SMART Schools)
Replacement	Back-Up Tape Library	Data Center	Spring 2024	\$75,000 (SMART Schools)
Upgrade	Fiber between Data Closets	WSS	2024-2025 School Year	\$50,000 (SMART Schools or BOCES)
Replacement	Core, devices and data center UPS	Data Center	2024-2025 School Year	\$100,000 (SMART Schools or BOCES)

End User Device Replacement

The District will maintain an end-user replacement plan to ensure staff and students are supported with the necessary tools.

Description	Device	Building	Timeline	Cost
Student Device Replacement	Chromebooks	Middle School	2022-2023	\$114,000

Student Device Replacement	Chromebooks	High School	2023-2024	\$210,000
Student Device Replacement	Chromebooks	North Street School	2024-2025	\$220,000
Teacher Device Replacement	Laptops	District	2025-2026	\$154,000
Student Device Replacement	iPads	West Street School	2025-2026	\$180,000

Appendix I: Contact Information

Internal Contact Information:

Person	Title/Area	Contact Information
Stephen Kruger	Assistant Superintendent of Administrative Services	Office: (315) 781-4131 Email: skruger@genevacsd.org
Beth Dinkel	Computer Service Representative	Office: (315) 781-0400 x 1010 Email: bdinkel@genevacsd.org
Greg Bennet	Application Support Specialist	Office x1006 Email: greg.bennett@genevacsd.org

Edutech/WFL Boces Contact Information:

Person/Title	Title/Area	Contact Information
Help Desk Edutech Support	Edutech Support	Phone: 1-800-722-5797
John Shipley	LakeNet Service Tech	Email: john.shipley@edutech.org
Dr. Kelli Echdahl	Director of Edutech	Phone: 315-332-7321 Email: kelli.eckdahl@edutech.org

External Contact Information:

Person	Title/Area	Contact Information
Verizon Wireless Phone Provider	Verizon Wireless Phone Provider	Phone: 800-554-3900
Frontrunner Telecommunications	Frontrunner Telecommunications	Phone support Phone: 585-292-8239 Email: support@frontrunnersupport.com
Day Automation HVAC and Security Provider	Day Automation HVAC and Security Provider	Phone: 800-836-0969 x 232 Email: servicedesk@dayautomation.com