Shaker Regional School District



Data Governance Manual June 2019

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Introduction

The Shaker Regional School District is committed to protecting the privacy of our students, parents/guardians, and employees by maintaining strong privacy and security protections. The protection of this information is a significant responsibility. We value the trust our students, parents/guardians, and employees have given us.

The Shaker Regional School District's Data Governance Manual includes information regarding the data governance team, data and information governance, applicable School Board policies and district procedures, as well as applicable appendices and referenced supplemental resources.

This manual outlines how operational and instructional activity shall be carried out to ensure that the district's data is accurate, accessible, consistent, and protected. This manual establishes who is responsible for information under various circumstances and specifies what procedures shall be used to manage and protect it. Definitions of terminology can be found in Appendix A: Definitions.

The Shaker Regional School District's Data Governance Manual shall be a living document. To make the document flexible, details are outlined in the appendices and referenced supplemental resources.

Data Governance Team

The Shaker Regional School District's Data Governance team consists of the following positions: Superintendent, Business Administrator, Principals, Director of Curriculum, Director of Student Services, and the Director of Information Technology. Members of the Data Governance Team will act as data stewards for all data under their direction. The Director of Information Technology will act as the Information Security Officer (ISO), with assistance from members of the full technology team. The Business Administrator is the district's alternate ISO and will assume the responsibilities of the ISO when the ISO is unavailable. All members of the district administrative team will serve in an advisory capacity as needed.

Purpose

The School Board recognizes the value and importance of a wide range of technologies for a well-rounded education, enhancing the educational opportunities and achievement of students. The Shaker Regional School District provides its faculty, employees, and administrative employees access to technology devices, software systems, network, and internet services to support research and education. All components of technology must promote the educational objectives of Shaker Regional School District and be used in ways that are legal, that are respectful of the rights of others, and protective of juveniles.

To that end, the district must collect, create and store confidential information. Accurately maintaining and protecting this data is important for efficient district operations, compliance with laws mandating confidentiality, and maintaining the trust of all district stakeholders. All persons who have access to district data are required to follow state and federal law, district policies and procedures, and other rules created to protect this information.

It is the policy of the Shaker Regional School District that data or information in all its forms, written, electronic, or printed is protected from accidental or intentional unauthorized modification, destruction or disclosure throughout its life cycle. This protection includes an appropriate level of security over the equipment, software, and practices used to process, store, and transmit data or information. All employees and authorized district contractors or agents using confidential information will strictly observe protections put into place by the district.

Scope

This data security manual's standards, processes, and procedures apply to all students and employees of the district, contractual third parties and agents of the district, and volunteers who have access to district data systems or data. This policy applies to all forms of Shaker Regional School District data and information, including but not limited to:

- Speech, spoken face to face, or communicated by phone or any current and future technologies.
- Hard copy, data printed or written.
- Communications sent by post/courier, fax, electronic mail, text, chat, and/or any form of social media.
- Data stored and/or processed by any electronic device, including servers, computers, tablets, and mobile devices.
- Data stored on any type of internal, external, or removable media or cloud based services.
- Any computer, laptop, mobile device, printing and/or scanning device, network appliance/equipment, AV equipment, server, internal or external storage, communication device or any other current or future electronic or technological device may be referred to as systems, assets or resources.
- The terms data and information are used separately, together, and interchangeably throughout the policy, but the intent is the same.
- All involved systems and information are considered assets of the Shaker Regional School District and shall be protected from misuse, unauthorized manipulation, and destruction.

Regulatory Compliance

The district will abide by any law, statutory, regulatory, or contractual obligations affecting its data systems (see Appendix B: Laws, Statutory, and Regulatory Security Requirements). The Shaker Regional School District complies with the NH Minimum Standards for Privacy and Security of Student and Employee Data. The Shaker Regional School District complies with all other applicable regulatory acts including but not limited to the following:

- Children's Internet Protection Act (CIPA)
- Children's Online Privacy Protection Act (COPPA)
- Family Educational Rights and Privacy Act (FERPA)
- Health Insurance Portability and Accountability Act (HIPAA)
- Payment Card Industry Data Security Standard (PCI DSS)
- Protection of Pupil Rights Amendment (PPRA)
- Individuals with Disabilities in Education Act (IDEA)
- New Hampshire State RSA Student and Teacher Information Protection and Privacy

NH RSA 189:65 Definitions

NH RSA 189:66 Data Inventory and Policies Publication

NH RSA 189:67 Limits on Disclosure of Information

NH 189:68 Student Privacy

NH RSA 189:68-a - Student Online Personal Information

- New Hampshire Minimum Standards for Privacy and Security of Student
- New Hampshire State RSA Right to Privacy:

NH RSA 359-C:19 - Notice of Security Breach - Definitions

Data User Compliance

The Data Governance Manual applies to all users of Shaker Regional School District's information including: employees, students, volunteers, and authorized district contractors or agents. All users of data are to maintain compliance with School Board Policies and District administrative procedures, EHAB (Data Governance and Security), GBEF (School District Internet Access for Employee), EGA (Communication Services- Computer Systems and Internet Access) R&P EGA(Student and Employee Acceptable Use), JICJ (Electronic Communication Devices), JICL (School District Internet Access for Students) and all policies, procedures, and resources as outlined within this Data Governance Manual and School Board Policy.

A consistently high level of personal responsibility is expected of all users granted access to the district's technology resources. Any violation of district policies or procedures regarding technology usage may result in temporary, long-term, or permanent suspension of user privileges. User privileges may be suspended pending investigation into the use of the district's technology resources.

Unless permission has been granted by the ISO or designee, no employee, vendor or other person may remove confidential or critical data from the district's premises or the district's network, remove a device containing confidential or critical data from the district's premises, or modify or copy confidential or critical data for use outside the district. If permission is given, the data may be accessed only on a district-provided device with appropriate security controls or through a secure virtual private network (VPN). When users access confidential or critical data from a remote location, the user must take precautions to ensure that the confidential or critical data is not downloaded, copied, or otherwise used in a manner that would compromise the security and confidentiality of the information.

Employees who fail to follow the law or district policies or procedures regarding data governance and security may be disciplined in accordance with CBA or terminated. Volunteers may be excluded from providing services to the district. The district will end business relationships with any contractor who fails to follow the law, district policies or procedures, or the confidentiality provisions of any contract. In addition, the district reserves the right to seek all other legal remedies, including criminal and civil action and seeking discipline of an employee's teaching certificate.

The district may suspend all access to data or use of district technology resources pending an investigation. Violations may result in temporary, long-term, or permanent suspension of user privileges. The district will cooperate with law enforcement in investigating any unlawful actions. The Superintendent or designee has the authority to sign any criminal complaint on behalf of the district.

Any attempted violation of district policies, procedures, or other rules will result in the same consequences, regardless of the success of the attempt.

Possible disciplinary/corrective action may be instituted for, but is not limited to, the following:

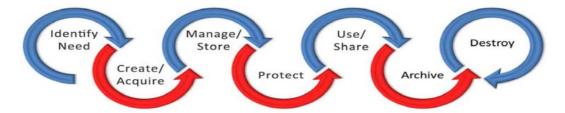
- Unauthorized disclosure of personally identifying information (PII) or confidential information.
- Sharing your user IDs or passwords with others (exception for authorized technology employees for the purpose of support).
- Applying for a user ID under false pretenses or using another person's ID or password.
- Unauthorized use of an authorized password to invade student or employee privacy by examining records or information for which there has been no request for review.
- The unauthorized copying of system files.
- Attempting to secure a higher level of privilege without authorization.
- Installation or use of unlicensed software or software not approved for district technological

systems.

- The intentional unauthorized altering, destruction, or disposal of district information, data and/or systems. This includes the unauthorized removal of technological systems such as but not limited to: laptops, internal or external storage, computers, servers, backups or other media, that may contain PII or confidential information.
- The introduction of computer viruses, hacking tools, or other disruptive or destructive programs.

Data Lifecycle

Data Governance is necessary at each phase in the data lifecycle. This lifecycle starts at evaluating the need for data collection and ends when the data is destroyed. It is important that appropriate safeguards, policies, procedures and practices are in place for each phase of the data lifecycle.



Identifying Need & Assessing Systems for District Requirements

To accomplish the district's mission and to comply with the law, the district may need to maintain confidential information, including information regarding students, parents/guardians, employees, applicants for employment, and others. The district will collect, create, or store confidential information only when the Superintendent or designee determines it is necessary.

New Systems

District employees are encouraged to research and utilize online services or applications to engage students and further the district's educational mission. However, before any online service or application is purchased or used to collect or store confidential or critical information, including confidential information regarding students or employees, the ISO or designee must approve the use of the service or application and verify that it meets the requirements of the law and School Board policy and appropriately protects confidential and critical information. This prior approval is also required when the services are obtained without charge.

Memorandums of Understanding (MOU), contracts, terms of use and privacy policy for any system that creates, collects, or uses personally identifiable information (PII), student records, or confidential data must be reviewed by the ISO prior to initiation.

All new resources shall be properly evaluated against the following criteria, when applicable:

- Impact on technology environment, including storage and bandwidth
- Hardware requirements, including any additional hardware
- License requirements/structure, number of licenses needed, and renewal cost
- Maintenance agreements, including cost
- Resource update and maintenance schedule
- Funding for the initial purchase and continued licenses and maintenance

- Evaluate terms of service, privacy policy, and MOU/contract that meet the following criteria:
 - o The district continues to own the data shared, and all data must be available to the district upon request.
 - The vendor's access to and use of district data is limited; the data cannot be used for marketing, targeted advertising, or data mining; and the data cannot be shared with third parties unless allowed by law and authorized by the district. If metadata is collected, it will be protected to the same extent as the district's confidential or critical information.
 - o District data will be maintained in a secure manner by applying appropriate technical, physical, and administrative safeguards to protect the data.
 - o The online or application service provider will comply with district guidelines for data transfer or destruction when contractual agreement is terminated.
 - o All data will be treated in accordance to federal, state, and local regulations
 - o The provider assumes liability and provides appropriate notification in the event of a data breach.

Note: Exceptions can be made by the ISO when all the criteria cannot be met for a legitimate reason while still meeting all regulatory requirements for use. Parent and/ or guardian permission is requested during the yearly online registration process for district vetted and approved applications and tools.

A <u>current list</u> of all vetted and approved software systems, tools and applications is published on the Shaker Regional School District's <u>Technology Use and Student Data Privacy</u> website.

Review of Existing Systems

The District will ensure that data collection is aligned with School Board Policy EHAB. Data systems shall be regularly reviewed to ensure that only necessary data is being transmitted and collected.

Individual student level data is submitted to different approved service providers in order to ensure business operations and instructional services. At times, these imports include PII for employees and students. The District must ensure that each piece of PII is necessary for operations or instruction and that the providers are abiding by their terms of service.

The District will audit data imports annually. These audits should include:

- Review of provider's terms of service to ensure they meet the District's data security requirements.
- Verification that software imports are accurate and pulling correct information.
- Verification that, when applicable, the employees, students, and classes included in the
 imports are still necessary for instructional purposes (only those that need data collected are
 included in import).
- Determine if the fields included in the imports are still necessary for intended purpose.

Management and Storage

Systems Security

The district will provide access to confidential information to appropriately trained district employees and volunteers only when the district determines that such access is necessary for the performance of their duties. The district will disclose confidential information only to authorized district contractors or agents who need access to the information to provide services to the district and who agree not to disclose the information to any other party except as allowed by law and authorized by the district (School Board Policy EHAB). Therefore, systems access will only be given on an as-needed basis as determined by the data manager and ISO. Further information regarding Electronic Access Security Controls is contained in the

Security/Protection section of this manual.

Data Management

The effective education of students and management of district personnel often require the district to collect information, some of which is considered confidential by law and district policy. In addition, the district maintains information that is critical to district operations and that must be accurately and securely maintained to avoid disruption to district operations.

Data Managers are responsible for the development and execution of practices and procedures that ensure the accuracy and security of data in an effective manner. All district administrators are data managers for all data collected, maintained, used, and disseminated under their supervision, as well as data they have been assigned to manage. Data managers will:

- Ensure that system account creation procedures and data access guidelines appropriately match employee's job functions with the data on instructional and operational systems;
- Review all employees with custom data access beyond their typical group's access;
- Review district processes to ensure that data will be tracked accurately;
- Review contracts with instructional and operational software providers to ensure that they are current and meet the district data security guidelines;
- Ensure that employees are trained in the district's proper procedure and practices in order to ensure accuracy and security of data;
- Assist the ISO in enforcing district policies and procedures regarding data management.

Data Classification and Inventory

Classification is used to promote proper controls for safeguarding the confidentiality of data. Regardless of classification, the integrity and accuracy of all classifications of data are protected. The classification assigned and the related controls applied are dependent on the sensitivity of the data. Data is classified according to the most sensitive detail they include. Data recorded in several formats (e.g., source document, electronic record, report) have the same classification regardless of format (see Appendix E: Data Classification Levels).

The ISO or designee will identify all systems containing district data, such as student information systems, financial systems, payroll systems, transportation systems, food-service systems, email systems, instructional software applications and others. The ISO or designee will identify the data files and data elements maintained in those systems and identify confidential and critical information the district possesses or collects.

The district will create and maintain a data inventory for all information systems containing PII or confidential information. When possible, a data dictionary will be maintained for critical information systems. The data inventory will contain the following elements:

- Data Source
- What data is stored
- Where the data is stored
- Employee or Employee categories that have access to the data

Security/Protection

Risk Management

A thorough risk analysis of all Shaker Regional School District's data networks, systems, policies, and procedures shall be conducted as requested by the Superintendent, ISO, or designee. An internal audit of

district network security will be conducted annually by District Technology employees. This analysis shall be completed using the risk management steps outlined in the Data Security Checklist (Appendix D). The product of the risk analysis will be referred to as the risk assessment. The risk assessment shall be used to develop a plan to mitigate identified threats and risks to an acceptable level by reducing the extent of vulnerabilities.

Security Logs

The district will maintain a comprehensive list of critical system events that will be logged and monitored to ensure data security. These events will include, but are not limited to, access to critical systems and modification of critical data. When applicable, notifications will be established for critical event triggers.

Physical Security Controls

Most technology telecommunication closets are housed in secure locations. Access authorization is assigned through the Director of Information Technology, Network Administrator, and/or the Director of Building and Grounds. In addition, access to areas in which information processing is carried out shall be restricted to only appropriately authorized individuals (see appendix G: Physical Security Controls).

No technological systems shall be disposed of or moved without adhering to the appropriate procedures (see Appendix H: Asset Management).

Inventory Management

The district shall maintain a process for inventory control in accordance with federal and state requirements and School Board policy. All district technology assets will be maintained in inventory and verified through the regular inventory verification process (see Appendix H: Asset Management).

Virus, Malware, Spyware, Phishing and SPAM Protection

The district uses a multi-layered approach to ensure that all electronic files are appropriately scanned for viruses, malware, spyware, phishing and SPAM. These include, but are not limited to, enterprise virus/malware/ spyware software, group policy, gateways, firewalls, and content filter. Users shall not turn off or disable district protection systems or install other systems (see Appendix I: Virus, Malware, Spyware, Phishing and SPAM Protection).

Electronic Access Security Controls

District employees will only access personally identifiable and/or confidential information if necessary to perform their duties. The district will only disclose this information to authorized district contractors or agents who need access to the information to provide services to the district and who agree not to disclose the information to any other party except as allowed by law.

Mechanisms to control access to PII, confidential information, internal information, and computing resources include, but are not limited to, the following methods:

- Identification/Authentication: Unique user identification (user ID) and authentication are required for all systems that maintain or access PII, confidential information, and/or internal information. Users will be held accountable for all actions performed on the system with their User ID. User accounts and passwords shall not be shared.
- **Authorization:** Access controls are maintained through a partnership between the technology department, human resources (HR), and data managers.

Additionally, only employees of the district Technology Department or authorized contractors will be granted access to domain level administrator and local machine administrator accounts in order to complete their job functions.

Employee Users

All new employee accounts are authorized through an HR hiring process (see Appendix J: Account Management). Role-based permissions and security groups are used to establish access to all systems (see Appendix K: Data Access Roles and Permissions). If an employee requires additional access, a request must be made directly to the ISO with a clear justification for access.

Contractors/Vendors

Access by contractors/vendors is governed through the same process using School Board Policy EHAB. All contractor/vendor access must be approved by the ISO. Once the approval has been obtained, the technology department will create the account, only granting access to the server/application that the contractor/vendor supports.

Password Security

The District will enforce secure passwords for all systems within their control (see Appendix L: Password Security). When possible, the district will utilize Single Sign On (SSO) or LDAP/Active Directory Integration to maintain optimal account security controls.

Concurrent Sessions

When possible, the district will limit the number of concurrent sessions for a user account in a system.

Remote Access

Access into the district's network from outside is strictly prohibited without explicit authorization from the ISO. Remote access will be granted through virtual private network (VPN) connection through the district's network VPN appliance; no other method of remote access shall be granted without explicit authorization from the ISO. PII, confidential information, and/or internal information that is stored or accessed remotely shall maintain the same level of protection as information stored and accessed within the district's network.

In the event that VPN access is needed by a contractor/vendor, access must be approved by the ISO. The Network Administrator will establish the contractor account, only granting access to the server/application that the contractor/vendor supports.

All VPN accounts will be reviewed at least annually.

Securing Data at Rest and Transit

District data security applies to all forms of data, including data stored on devices, data in transit, and data stored on additional resources. All district external hard drives will be maintained in inventory and verified through the regular inventory verification process. Regular transmission of student data to internal and external services is managed by the technology department using a secure data transfer protocol.

Users must ensure that they are securely storing their data. Guidelines have been established for Cloud Storage and File Sharing, External Storage Devices, and File Transmission Practices (see Appendix F: Securing Data at Rest and Transit). These guidelines are outlined in the following section.

Usage and Dissemination

A consistently high level of personal responsibility is expected of all users granted access to the district's technology resources. All district employees, volunteers, contractors, and agents who are granted access to critical and confidential information are required to keep the information secure and are prohibited from disclosing or assisting in the unauthorized disclosure of confidential information. All individuals using confidential and critical information will strictly observe protections put into place by the district including, but not limited to, maintaining information in locked rooms or drawers, limiting access to electronic files, updating and maintaining the confidentiality of password protections, encrypting and redacting information, and disposing of information in a confidential and secure manner.

All users are responsible for the security and integrity of the data they create, store, or access. Users are expected to act as good stewards of data and treat data security and integrity with a high degree of responsibility and priority. Users must follow all guidelines outlined with School Board policies, specifically Employee and Student Technology Usage (GBEF, EGA, JICL, JICJ), Data Governance and Security (EHAB), and Student Records (JRA, R&P JRA 1 & 2).

District employees, contractors, and agents will notify the ISO or designee immediately if there is reason to believe confidential information has been disclosed to an unauthorized person or any information has been compromised, whether intentionally or otherwise.

Data Storage and Transmission

All employees and students who log into a district-owned PC computer will be provided with several options for data storage and transmission. Employees and students will need to ensure that they are securely storing their data. Employees and students will be able to store data on the local device. It is important to note that this data is not a part of the district's continuity plan, and thus will not be backed up by the district's backup solution. Employees and students will also have a mapped personal folder. This folder acts as a redirection of document's to district file servers. Access to these files is restricted to the folder's owner (employee or student who is assigned) and district enterprise administrator accounts. Employees and students using Chromebook devices have limited local storage capabilities. Chromebook users are to store data within their Google GSuite for Education Drive account.

Cloud Storage and File Sharing

The term "Cloud Storage" is used to define all types of remote server storages accessed by users through the Internet. All employees and students are provided with a Google GSuite for Education and Office365 account that provides unlimited storage. Users are responsible for all digital content on their district-provided Google GSuite for Education Drive (see Appendix F: Securing Data at Rest and Transit).

File Transmission Practices

Employees are responsible for securing sensitive data for transmission through email or other channels. Employees shall not transmit files to third party file transfer services without district approval. When possible, employees should de-identify or redact any PII or confidential information prior to transmission. Regular transmission of student data to services such as a single sign on provider is managed by the technology department using a secure data transfer protocol (see Appendix F: Securing Data at Rest and Transit).

Mass Data Transfers

Downloading, uploading, or transferring PII, confidential information, and internal information between systems shall be strictly controlled. Requests for mass download of, or individual requests for, information for

research or any other purposes that include PII shall be reviewed and approved by the Superintendent, ISO or designee.

Printing

When possible, employees should de-identify or redact any PII or confidential information prior to printing. PII and confidential information shall not be downloaded, copied or printed indiscriminately, or left unattended and open to compromise.

Oral Communications

Employees shall be aware of their surroundings when discussing PII and confidential information. This includes, but is not limited to, the use of cellular telephones in public areas. Employees shall not discuss PII or confidential information in public areas if the information can be overheard. Caution shall be used when conducting conversations in: semi-private rooms, waiting rooms, corridors, elevators, stairwells, cafeterias, restaurants, or public areas.

Training

The district shall create and maintain an annual data security training plan. This plan will consist of the following:

- Training for all employees on technology policies and procedures, including confidentiality and data privacy and cybersecurity.
- Training for all new employees on technology policies and procedures, including confidentiality and data privacy and cybersecurity (training must be completed within 21 days of account creation).

Archival and Destruction

Once data is no longer needed, the ISO or designee will work with the data managers to ensure that it is appropriately destroyed. Special care will be taken to ensure that confidential information is destroyed appropriately and in accordance with law. Confidential paper records will be destroyed using methods that render them unreadable, such as shredding. Confidential digital records will be destroyed using methods that render the record unretrievable.

District Data Destruction Processes

The district will regularly review all existing data stored on district-provided storage for the purposes of ensuring data identification and appropriate destruction. Data destruction processes will align with School Board Policy EHB and R&P-EHB. District data managers will regularly review systems and data to ensure that data that is no longer needed is destroyed. The following exceptions will be made:

- Data in an active litigation hold will be maintained until the conclusion of the hold.
- Student Google GSuite for Education accounts will be maintained for one school year after the student's final date of attendance. Students will not have access to data through account and must contact ISO or designee for access.
- Employee Google GSuite for Education accounts will be suspended after the final work day, unless the ISO approves to maintain access.

Asset Disposal

The district will maintain a process for physical asset disposal in accordance to School Board policy (DN). The district will ensure that all assets containing PII, confidential, or internal information are disposed of in a manner that ensures that this information is destroyed (see Appendix H: Asset Management).

Critical Incident Response

Controls shall ensure that the district can recover from any damage to or breach of critical systems, data, or information within a reasonable period of time. Each school, department, or individual is required to report any instances immediately to the ISO or designee for response to a system emergency or other occurrence (for example, fire, vandalism, system failure, data breach, and natural disaster) that damages/breaches data or systems.

Business Continuity

The district's administrative procedure R&P EHB delineates the timeline for data retention for all district data. The district will maintain systems that provide near-line and off-site data backup. These systems shall allow for the full recovery of critical systems in the event of a disaster. The district will test near-line and off-site backups of critical systems quarterly.

Disaster Recovery

The district's Technology Disaster Recovery Plan outlines critical employee responsibilities and processes in the event of a disaster or critical data loss. The District shall maintain a list of all critical systems and data, including contact information. The Technology Disaster Recovery Plan shall include processes that enable the district to continue operations and efficiently restore any loss of data in the event of fire, vandalism, natural disaster, or critical system failure (see Appendix M: Disaster Recovery Plan).

Data Breach Response

New Hampshire's Data Breach Law (RSA 359-c:19, 20, 21) is triggered when a school district computer system is breached and personal information is acquired without authorization in a way that compromises the security or confidentiality of the information. The law requires a school district experiencing a breach to conduct a good faith and reasonably prompt investigation to determine the likelihood that personal information was, or will be, misused. The Data Breach Response Plan enables the district to respond effectively and efficiently to a data breach involving personally identifiable information (PII) as defined by NH Law, confidential or protected information (ie-FERPA), district identifiable information, and other significant cybersecurity incident. The Data Breach Response Plan shall include processes to validate and contain the security breach, analyze the breach to determine scope and composition, minimize impact to the users, and provide notification (see Appendix N: Data Breach Response Plan).

Appendix A

Definitions

Confidentiality: Data or information is not made available or disclosed to unauthorized persons.

Confidential Data/Information: Information that the district is prohibited by law, policy or contract from disclosing or that the district may disclose only in limited circumstances. Confidential data includes, but is not limited to, personally identifiable information (PII) regarding students and employees.

Critical Data/Information: Information that is determined to be essential to district operations and that must be accurately and securely maintained to avoid disruption to district operations. Critical data is not necessarily confidential.

Data: Facts or information. Data can be in any form: oral, written, or electronic.

Data Breach, Breach of Security or Breach: A security incident in which there was unauthorized access to and unauthorized acquisition of personal information maintained in computerized form that compromises the security, confidentiality, or integrity of the information.

Data Integrity: Data is current, accurate, and has not been altered or destroyed in an unauthorized manner.

Data Management: The development and execution of policies, practices, and procedures in order to manage the accuracy and security of district instructional and operational data in an effective manner.

Data Owner: User responsible for the creation of data. The owner may be the primary user of that information or the person responsible for the accurate collection/recording of data. Ownership does not signify proprietary interest, and ownership may be shared. The owner of information has the responsibility for:

- Knowing the information for which she/he is responsible.
- Determining a data retention period for the information according to School Board policy and state statute.
- Ensuring appropriate procedures are in effect to protect the integrity, confidentiality, and availability of the data used or created.
- Reporting promptly to the ISO the loss or misuse of data.
- Initiating and/or implementing corrective actions when problems are identified.
- Following existing approval processes for the selection, budgeting, purchase, and implementation of any digital resource.

Information Security Officer: The Information Security Officer (ISO) is responsible for working with the Superintendent, Data Governance Team, data managers, data owners, and users to develop and implement prudent security policies, procedures, and controls. The ISO will oversee all security audits and will act as an advisor to:

- Data owners for the purpose of identification and classification of technology and data-related resources.
- Systems development and application owners in the implementation of security controls for information on systems, from the point of system design through testing and production implementation.

Systems: Any computer, laptop, mobile device, printing and/or scanning device, network appliance/equipment, AV equipment, server, internal or external storage, communication device, or any other current or future electronic or technological device, whether hosted by the district or provider.

Security Incident: An event that 1) actually or potentially jeopardizes the confidentiality, integrity, or availability of an information system or the information the system processes, stores, or transmits, or 2) constitutes a violation or imminent threat of violation of security policies, security procedures, or acceptable-use policies.

Personally Identifiable Information (PII): Any information about an individual maintained by an agency, including (1) any information that can be used to distinguish or trace an individual's identity, such as name, social security number, State Assigned Student Identification, date and place of birth, mother's maiden name, or biometric records and (2) any other information that is linked or linkable to an individual, such as medical, educational, financial, and employment information.

Risk: The probability of a loss of confidentiality, integrity, or availability of information resources.

User: The user is any person who has been authorized to read, enter, print, or update information. A user of data is expected to:

- Access information only in support of their authorized job responsibilities;
- Comply with all data security procedures and guidelines;
- Keep personal authentication confidential (user IDs, passwords, secure cards, PINs, access codes);
- Report promptly to the ISO the loss or misuse of data;
- Follow corrective actions when problems are identified.

Appendix B

Laws, Statutory, and Regulatory Security Requirements

CIPA: The Children's Internet Protection Act was enacted by Congress to address concerns about children's access to obscene or harmful content over the Internet. CIPA imposes certain requirements on schools or libraries that receive discounts for Internet access or internal connections through the E-rate program. Schools subject to CIPA have two additional certification requirements: 1) their Internet safety policies shall include monitoring the online activities of minors; and 2) as required by the Protecting Children in the 21st Century Act, they shall provide for educating minors about appropriate online behavior, including interacting with other individuals on social networking websites and in chat rooms, and cyberbullying awareness and response. https://www.fcc.gov/consumers/guides/childrens-internet-protection-act

COPPA: The Children's Online Privacy Protection Act regulates operators of commercial websites or online services directed to children under 13 that collect or store information about children. Parental permission is required to gather certain information. https://www.ftc.gov/tips-advice/business-center/privacy-and-security/children%27s-privacy

FERPA: The Family Educational Rights and Privacy Act applies to all institutions that are recipients of federal aid administered by the Secretary of Education. This regulation protects student information and accords students specific rights with respect to their data.

HIPAA: The Health Insurance Portability and Accountability Act applies to organizations that transmit or store Protected Health Information (PHI). It is a broad standard that was originally intended to combat waste, fraud, and abuse in health care delivery and health insurance, but is now used to measure and improve the security of health information, as well.

https://www.hhs.gov/hipaa/index.html

http://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html

IDEA: The Individuals with Disabilities in Education Act (IDEA) is a law that makes available a free appropriate public education to eligible children with disabilities throughout the nation and ensures special education and related services to those children.

https://sites.ed.gov/idea/

PCI DSS: The Payment Card Industry Data Security Standard was created by a consortium of payment brands including American Express, Discover, MasterCard, and Visa. It covers the management of payment card data and is relevant for any organization that accepts credit card payments.

www.pcisecuritystandards.org

PPRA: The Protection of Pupil Rights Amendment affords parents and minor students rights regarding our conduct of surveys, collection and use of information for marketing purposes, and certain physical exams. https://www2.ed.gov/policy//gen/guid/fpco/ppra/index.html

New Hampshire State RSA 189:65-189:68: Student and Teacher Information Protection and Privacy as defined by the following sections:

- NH RSA 189:65 Definitions
- NH RSA 189:66 Data Inventory and Policies Publication
- NH RSA 189:67 Limits on Disclosure of Information
- NH 189:68 Student Privacy
- NH RSA 189:68-a Student Online Personal Information

New Hampshire Minimum Standards for Privacy and Security of Student and Employee Data

New Hampshire State RSA Chapter 359-C Right to Privacy:

- NH RSA 359-C:19 Notice of Security Breach Definitions
- NH RSA 359-C:20 Notice of Security Breach Required
- NH RSA 359-C:21 Notice of Security Breach Violation

Appendix C

Digital Resource Acquisition and Use

All new resources shall be properly evaluated against the following criteria, when applicable:

- Impact on technology environment, including storage and bandwidth;
- Hardware requirements, including any additional hardware;
- License requirements/structure, number of licenses needed, and renewal cost;
- Maintenance agreements, including cost;
- Resource update and maintenance schedule:
- Funding for the initial purchase and continued licenses and maintenance;
- Evaluate terms of service, privacy policy, and MOU/contract that meet the following criteria:
 - The district continues to own the data shared, and all data must be available to the district upon request;
 - The vendor's access to and use of district data is limited; the data cannot be used for marketing, targeted advertising, or data mining; and the data cannot be shared with third parties unless allowed by law and authorized by the district. If metadata is collected, it will be protected to the same extent as the district's confidential or critical information;
 - O District data will be maintained in a secure manner by applying appropriate technical, physical, and administrative safeguards to protect the data;
 - The provider will comply with district guidelines for data transfer or destruction when contractual agreement is terminated;
 - o No API will be implemented without full consent of the district;
 - o All data will be treated in accordance with federal, state, and local regulations;
 - The provider assumes liability and provides appropriate notification in the event of a data breach.

Note: Exceptions can be made by the ISO when all the criteria cannot be met for a legitimate reason while still meeting all regulatory requirements for use. Parent permission is requested from parents during the yearly online registration process for district vetted and approved applications and tools.

Approved Digital Resources

In order to ensure that all digital resources used meet security guidelines and to prevent software containing malware, viruses, or other security risks, digital resources that have been vetted are categorized as approved or denied.

- A <u>list</u> of vetted software will be maintained on the District Technology Use and Student Data Privacy website.
- It is the responsibility of the employee to submit a request to use a new digital resource if a resource is not listed.
- Digital resources that are denied or have not yet been vetted will not be allowed on district-owned devices or used as part of district business or instructional practices.

Digital Resource Licensing/Use

All computer software licensed or purchased for district use is the property of the district and shall not be copied for use at home or any other location, unless otherwise specified by the license agreement.

All employees must adhere to the following guidelines regarding digital resource licensing/use:

• Only approved district resources are to be used.

- District software licenses will be:
 - o Accurate, up to date, and adequate;
 - o In compliance with all copyright laws and regulations;
 - o In compliance with district, state, and federal guidelines for data security.
- Software installed on Shaker Regional School District systems and other electronic devices will have a current license or will be removed from the system or device.
- Resources with or without physical media (e.g. downloaded from the Internet, apps, or online) shall still be properly vetted and licensed, if necessary, and is applicable to this procedure.
- Under no circumstances can an employee act as a parental agent when creating student accounts for online resources; resources requiring this permission must be approved at the district level.

Appendix D

Data Security Checklist

A thorough risk analysis of all Shaker Regional School District data networks, systems, policies, and procedures shall be conducted no less than every five years or as requested by the Superintendent, ISO, or designee by an independent third party. The risk analysis will include internal and external vulnerability cybersecurity risk assessments and external penetration testing of the district network. An internal audit of district network security will be conducted annually by district technology employees.

The Data Security Checklists examine the types of threat that may affect the ability to manage and protect the information resource. The analysis also documents any existing vulnerabilities found within each entity, which could potentially expose the information resource to threats. Finally, the analysis includes an evaluation of the information assets and the technology associated with its collection, storage, dissemination, and protection.

From the combination of threats, vulnerabilities, and asset values, an estimate of the risks to the confidentiality, integrity, and availability of the information is determined. The product of the risk analysis will be referred to as the risk assessment. The risk assessment shall be used to develop a plan to mitigate identified threats and risk to an acceptable level by reducing the extent of vulnerabilities.

Data Security Checklist for District Hosted Systems

- Inventory and classification of data on system
- Types of potential threats (internal, external, natural, manmade, electronic and non-electronic)
- Physical security of system
- Location within network, including network systems protection (firewall, content filter) and if system is externally facing or only allows for district network access
- Access controls, including password security (can district password requirements be enforced)
- Authentication methods (LDAP/Active Directory, Single Sign On, District managed account, user managed account)
- Server/system security patch frequency
- Ability to access from mobile devices
- Ability to maintain critical system event logs
- Ability to receive notification for critical system events

Data Security Checklist for Provider Hosted Systems

- Inventory and classification of data on system
- Types of potential threats (internal, external, natural, manmade, electronic and non-electronic)
- Contract, terms of service, and privacy policy are current and meet district data security requirements
- Provider has adequate data security measures including data management and incident response
- Ability to ensure proper access controls including password security (can district password requirements be enforced)
- Authentication methods (LDAP/Active Directory, Single Sign On, District managed account, user managed account)
- Server/system security patch frequency
- Ability to access from mobile devices
- Notification practices in the event of a system compromise or security breach

Appendix E

Data Classification Levels

Personally Identifiable Information (PII)

PII is information about an individual maintained by an agency, including:

- Any information that can be used to distinguish or trace an individual's identity, such as name, social security number, date and place of birth, mother's maiden name, or biometric records.
- Any other information that is linked or linkable to an individual, such as medical, educational, financial, and employment information.

Unauthorized or improper disclosure, modification, or destruction of this information could violate state and federal laws, result in civil and criminal penalties, and cause serious legal implications.

Confidential Information

Confidential Information is very important and highly sensitive material that is not classified as PII. This information is private or otherwise sensitive in nature and shall be restricted to those with a legitimate business need for access. Examples of confidential information may include: student records, personnel information, key financial information, proprietary information, system access passwords, and encryption keys.

Unauthorized disclosure of this information to individuals without a business need for access may violate laws and regulations, or may cause significant consequences for the district, its employees, parents, students, or other stakeholders. Decisions about the provision of access to this information shall always be cleared through the data manager and/or ISO.

Internal Information

Internal Information is intended for unrestricted use within the district and in some cases within affiliated stakeholders. This type of information is already widely-distributed within the district, or it could be distributed within the organization without advance permission from the information owner. Examples of Internal Information include internal policies and procedures and handbooks.

Unauthorized disclosure of this information to outsiders may not be appropriate due to copyright, legal, or contractual provisions.

Directory Information

Directory Information is information contained in an education record of a student that generally would not be considered harmful or an invasion of privacy if disclosed without the consent of a parent or eligible student. The school district designates the following items as directory information:

- Student's name
- Address
- Telephone listing
- Electronic mail address
- Photograph
- Date and place of birth
- Dates of attendance
- Grade level
- Participation in officially recognized activities and sports
- Weight and height of members of athletic teams
- Degrees, honors, and awards received
- The most recent educational agency or institution attended

• Student ID number, user ID, or other unique personal identifier used to communicate in electronic systems, but only if the identifier cannot be used to gain access to education records except when used in conjunction with one or more factors that authenticate the user's identity, such as a PIN, password, or other factor known or possessed only by the authorized user

This information may only be disclosed as permitted in School Board Policy JRA and R&P- JRA.

Public Information

Public Information has been specifically approved for public release by the Superintendent or appropriate district administrator. Examples of public information may include patron mailings and materials posted to the district's website.

This information may be disclosed outside of the district.

Appendix F

Securing Data at Rest and Transit

All employees and students who log into a district-owned PC computer will be provided with several options for data storage and transmission. Employees and students will need to ensure that they are securely storing their data. Employees and students will be able to store data on the local device. It is important to note that this data is not a part of the district's continuity plan, and thus will not be backed up by the district's backup solution. Employees and students may also have a mapped personal folder. This folder acts as a redirection of document folders to district file servers. Access to these files is restricted to the folder's owner (employee or student who is assigned) and district enterprise administrator accounts. The storage space is limited. Employees and students using Chromebook devices have limited local storage capabilities. Chromebook users are to store their data within their Google GSuite for Education Drive account.

Confidential and critical information will be saved and maintained in a secure manner using encryption or other password-protected security measures. Likewise, when data is transmitted, the district will use encryption or password-protected security measures.

Cloud Storage and File Sharing

The term "Cloud Storage" is used to define all types of remote server storages accessed by users through the Internet. All employees and students are provided with a Google GSuite for Education and Office365 account that provides unlimited storage. Users are responsible for all digital content on their district provided Google GSuite for Education Drive or OneDrive. When using Cloud Storage, employees must adhere to the following guidelines:

- Employees and students may not access cloud storage through third party applications outside of approved Internet browsers, OneDrive, and Google Drive App on Android & iOS. This will ensure that native operating systems do not replace cloud sharing security.
- Users need to be aware of default sharing settings on folders when they upload files. Users are required to limit sharing files to an as-needed basis.
- Employees and students must ensure that any cloud storage providers used are approved by the district and meet district student data and data security standards.
- When exiting the district, students should responsibly copy their content to their own personal storage solution.
- When exiting the district, employees should ensure that they are only copying personal content that
 they created. Employees are prohibited from copying content that contains confidential information,
 student records, or data.
- Data with personally identifiable information of employees or students may be posted to users' district-provided Google Drive or OneDrive with appropriate security settings. Users may not post this data to other cloud sharing platforms without consent of ISO.
- All users shall immediately report any cloud storage security problems of the district's technology resources to a teacher or administrator.
- Attempting to gain or gaining unauthorized access to cloud storage or the files of another is prohibited.
- As with other forms of district technology, district employees, students, and other Google GSuite for Education or OneDrive users have no expectation of privacy on data stored on this platform.

The term "File Sharing" is used to define all activities that share access to digital information whether in the cloud or on district-administered mapped drives. When file sharing, employees must adhere to the following guidelines:

- Users must abide by all policies and procedures regarding professional conduct and communication when sharing, reviewing, updating, commenting, and re-sharing.
- When sharing content, users must ensure that other users accessing the information in the files have appropriate access to the information based on job function.
- All users shall immediately report any inappropriate sharing of the district's technology resources to an administrator.

External Storage Devices

The term "External Storage Devices" is used to define all portable storage devices (including USB drives, rewritable CD/DVD, memory cards, and external hard drives) used by employees and students. While the district recognizes the advantages for employees and students to maintain information on these devices, users are strongly encouraged to rely on their district-provided Google GSuite for Education Drive or OneDrive account for all storage needs. When using external storage devices, employees must adhere to the following guidelines:

- Users are responsible for all content on external storage devices that have been connected to district technology resources.
- Users must ensure that they will not introduce harmful software including computer viruses, malware, non-district approved software, or hacking tools to district technology resources.
- Users must ensure that the data will remain secure through appropriate encryption or password
 protection when transferring files containing PII or protected information to an external storage
 device. Users should only keep the information stored on the external device for the duration of the
 project, and then promptly remove.
- Employees should never transfer or create confidential data or student records on personal storage devices.

File Transmission Practices

- Employees are responsible for securing sensitive data for transmission through email or other channels. When possible, employees should de-identify or redact any PII or confidential information prior to transmission.
- Employees should never include a password in any electronic communication unless directed to do so by technology staff.
- Employees should not transmit files to third party file transfer services without district approval.
- Regular transmission of student data to services such the District Library Management system, Food Service Management system, and Single Sign On Provider system is managed by the technology department using a secure data transfer protocol. All such services are approved by the Director of Information Technology.

Appendix G

Physical Security Controls

The following physical security controls shall be adhered to:

- Network systems shall be installed in an access-controlled area. The area in and around the computer facility shall afford protection against fire, water damage, and other environmental hazards such as power outages and extreme temperature situations.
- Monitor and maintain data centers' temperature and humidity levels.
- File servers and/or storage containing PII, Confidential, and/or Internal Information shall be installed in a secure area to prevent theft, destruction, or access by unauthorized individuals.
- Ensure network systems and network equipment are properly secured to prevent unauthorized physical access and data is properly safeguarded to protect from loss.
- Computers and other systems shall be secured against use by unauthorized individuals. It is the
 responsibility of the user to not leave these devices logged in, unattended, and open to unauthorized
 use.
- Monitor and control the delivery and removal of all data-storing technological equipment or systems.
 Maintain a record of all such items entering or exiting their assigned location using the district
 approved technology inventory program. No technology equipment regardless of how purchased or
 funded shall be moved without the explicit approval of the technology department.
- Ensure that technological equipment or systems being removed for transfer to another organization or being designated as surplus property is appropriately sanitized in accordance with applicable policies and procedures (see Appendix H: Asset Management).

Appendix H

Asset Management

Data security must be maintained through the life of an asset, including the destruction of data and disposal of assets. Any computer, laptop, mobile device, printing and/or scanning device, network appliance/equipment, AV equipment, server, internal or external storage, communication device, or any other current or future electronic or technological device may be referred to as a system, asset, or device.

All involved systems and information are assets of the district and are expected to be protected from misuse, unauthorized manipulation, and destruction.

Inventory

All technology devices or systems considered an asset are inventoried by the technology department. This includes, but is not limited to, network appliances, servers, computers, laptops, mobile devices, and external hard drives. The technology department will conduct annual inventory verification of all district devices. It is the responsibility of the technology department to update the inventory system to reflect any in-school transfers, in-district transfers, or other location changes for district technology assets.

Disposal Guidelines

Assets shall be considered for disposal in accordance with state/federal regulations and School Board policy (DN). The following considerations are used when assessing an asset for disposal:

- End of useful life;
- Lack of continued need;
- Obsolescence;
- Wear, damage, or deterioration;
- Excessive cost of maintenance or repair;
- Salable value.

The Director of Information Technology shall approve disposals of any district technology asset.

Methods of Disposal

Once equipment has been designated and approved for disposal (does not have salable value), it shall be handled according to one of the following methods. It is the responsibility of the technology department to update the inventory system to reflect the disposal of the asset.

Discard

All technology assets shall be discarded in a manner consistent with applicable environmental regulations. Electronic equipment may contain hazardous materials such as mercury, lead, and hexavalent chromium. When possible, any re-usable hardware that can be used as parts to repair and/or maintain district technology assets shall be removed (motherboards, screens, adapters, memory). In addition, systems may contain Personally Identifiable Information (PII), Confidential, or Internal information. Systems shall be rendered unreadable using industry accepted practices or physical destruction of this information prior to leaving the school district.

A district-approved vendor shall be contracted for the disposal of all technological systems/equipment. The vendor shall provide written documentation verifying the method used for disposal and a certificate stating that no data of any kind can be retrieved from the hard drive or any other component capable of storing data.

Under no circumstances should any technological systems/equipment be placed in the trash.

Donation/Gift

In the event that the district determines that an asset shall be donated or gifted, systems shall have all Personally Identifiable Information (PII), Confidential, and/or Internal Information rendered unreadable prior to leaving the school district. The Shaker Regional School District will not support or repair any equipment that is donated. In addition, software licenses are not transferred outside the district. Therefore, systems must be returned to factory installation prior to donation.

Appendix I

Virus, Malware, Spyware, Phishing and SPAM Protection

Virus, Malware, and Spyware Protection

Shaker Regional School District PC desktops, laptops, and file servers are protected using enterprise virus/malware/spyware software. Definitions are updated daily and an on-access scan is performed on all "read" files continuously. A full scheduled scan is performed on all servers weekly during non-peak hours. All files and systems are scanned.

Internet Filtering

Student learning using online content and social collaboration continues to increase. The Shaker Regional School District views Internet filtering as a way to balance safety with learning—letting good content, resources, and connections in while blocking the bad. To balance educational Internet resource and application use with student safety and network security, the Internet traffic from all devices on the district network is routed through the district firewall and content filter. Filtering levels are based on the role of the user, employee or student and student grade level. All sites that are known for malicious software, phishing, spyware, etc. are blocked.

Phishing and SPAM Protection

Email is filtered for viruses, phishing, spam, and spoofing using Google services.

Security Patches

Server patch management is performed regularly. Security patches are applied on an as-needed basis, but at least bi-weekly.

Appendix J

Account Management

Access controls are essential for data security and integrity. The Shaker Regional School District maintains a strict process for the creation and termination of district accounts. All new employee accounts are authorized through an HR hiring process prior to creation. Role-based permissions are used to establish access to all systems. Access security is audited at least annually or whenever access permission requirements are changed for a particular application/software or when an application/software is no longer necessary.

Employee Accounts

When an employee is hired by the Shaker Regional School District, the following process ensures that each employee has the correct access and permissions to the resources that are required for their position:

- Notification of new employee is sent from Human Resources to the Technology Department. This notification includes position, building assignment(s), and start date.
- Only after notification has been received from Human Resources does the Technology Department creates user accounts. The user is given access and permissions to the necessary resources based on their position and building assignment(s) (see Appendix K: Data Access Roles and Permissions).
- Any exception to permissions must be approved by the district administrator responsible for the system (data manager) and the Director of Information Technology.

When employment is ended, either by termination or resignation, account permissions are revoked in one of two ways:

- In the event of termination, HR will notify the Technology Department via email or phone call requiring the account to be disabled at once, preventing any further access to district resources.
- In the event of resignation, HR will notify the Technology Department via email indicating the termination date. The account is disabled at the end of business on the termination date, preventing further access to district resources.
- In the event that a user having elevated permissions to any system separates from the district, additional measures are taken to ensure that all elevated accounts to those systems are secure.

Local/Domain Administrator Access

Only employees of the district Technology Department will be granted access to domain level administrator and local machine administrator accounts in order to complete their job functions. The ISO can grant others administrator account access to perform their job function.

Remote Access

Access into the district's network from outside is strictly prohibited without explicit authorization from the ISO. Remote access will be granted through virtual private network (VPN) connection through the district's network VPN appliance; no other method of remote access shall be granted without explicit authorization from the ISO. PII, Confidential information, and/or Internal Information that is stored or accessed remotely shall maintain the same level of protection as information stored and accessed within the district's network.

In the event that VPN access is needed by a contractor/vendor, access must be approved by the ISO. The Network Administrator will establish the contractor account, only granting access to the server/application that the contractor/vendor supports.

All VPN accounts will be reviewed at least annually.

Appendix K

Data Access Roles and Permissions

Student Information System (SIS)

Employees are entered into the Shaker Regional School District's student information system. Only employees whose roles require access are provided accounts for this system.

The following minimum information is entered for each employee:

- Building/Site location
- Status Active
- Employee Type
- District Email Address
- Address
- District ID
- State ID
- Schedule

Access accounts for the district's SIS are set up based on employee role/position, building, and required access to student data and are assigned by the Director of Information Technology or designee. Teacher accounts are created for all employees responsible for taking student attendance and entering and maintaining grades. Teacher accounts only have access to students they teach or provide services to. Administrative accounts are created based on the employee's role/position and function and further restrictions to data are controlled through security groups. Security groups control access permissions to certain data sets, such as attendance, demographic data, grades, discipline, etc. and whether the employee can view or maintain data.

Financial System

All employees are entered into the district's financial system for the purpose of payroll and HR tracking. Only employees requiring access are provided accounts for the financial/personnel system.

After basic information and user ID are created, a security role is assigned to the account granting them access to designated areas of the financial system to complete their job responsibilities.

Special Education System

The State of New Hampshire provides the district access to the NH Special Education Information System (NHSEIS) that houses all student IEP information. Access accounts to NHSEIS are maintained by the district's Director of Student Services office through the MyNHDOE single sign on portal. A user role determines the user's authority and applicable permissions within the NHSEIS system

The following user roles access NHSEIS through the MyNHDOE portal: Case Manager, District Administrator, SAU employees, and School Administrator..

Health Software System

School District nurses, nurse substitutes, and technology employees are the only employees granted access to the district's Health Software system. Technology employee's access is for the purpose of upgrades and technical support for the use of the system. The medical data that is collected and maintained by the school nurses on the system includes immunizations, conditions, medications, and clinic logs (Time in/out of clinic and action taken). School nurses are the only accounts that can view and maintain medical information.

Food Services System

The district uses a Food Service software management system to track data and perform functions necessary for the efficient operation of the Food Service Program. Food service employees are granted accounts with access to only the parts of the system that are necessary to complete their job functions. Technology employee's access is for the purpose of upgrades and technical support for the use of the system and cash registers. Strict security roles and permissions are in place to ensure that confidential information is only viewable by authorized employees.

Appendix L

Password Security

The district requires the use of strictly controlled passwords for network access and for access to secure sites and information. All passwords to district systems shall meet or exceed the below requirements:

- Passwords shall never be shared with another person;
- When possible, user-created passwords should adhere to the same criteria as required for district network access as outlined below;
- Passwords shall never be saved when prompted by any application with the exception of single signon (SSO) systems as approved by the Technology Department;
- Passwords shall not be programmed into a computer or recorded anywhere that someone may find and use them:
- When creating a password for secure information or sites, it is important **not** to use passwords that are easily guessed due to their association with the user (i.e. children's names, pets' names, or birthdays);
- Users and employees who have reason to believe a password is lost or compromised must notify the technology help desk as soon as possible. The Technology Department will verify the identity of the person requesting the change before resetting the password.

District network access to resources managed through LDAP/SSO:

- Passwords must be "strong," and must be a minimum of 8 characters long, must include at least one uppercase character, one number, and one special character (! @ # \$ % & ?);
- Passwords will only be changed in the event the user shares their password with another employee or they believe their account has been hacked;
- Your password must not be similar to your username;
- Do not use your district password for any non-district systems;

Where possible, system software should enforce the following password standards:

- Passwords routed over a network shall be encrypted;
- Passwords shall be entered in a non-display field;
- System software shall enforce the changing of passwords and the minimum length;
- System software shall disable the user password when more than five consecutive invalid passwords are given.

Appendix M

Technology Disaster Recovery Plan

Objectives

The primary purpose of the Technology Disaster Recovery Plan (TDRP) is to enable the Shaker Regional School District (Shaker Regional) to respond effectively and efficiently to a natural disaster or critical failure of the district's data center and/or core systems. The objectives during a natural disaster or critical failure are the following:

- Minimize the loss or downtime of core systems and access to business critical data;
- Recover and restore the district's critical systems and data;
- Maintain essential technology resources critical to the day-to-day operations of the district;
- Minimize the impact to the employees and students during or after a critical failure.

Planning Assumptions

The following planning assumptions were used in the development of Shaker Regional's TDRP:

- There may be natural disasters that will have greater impact than others;
- There will be factors that are beyond the department's control or ability to predict during a disaster;
- There is the possibility of complete loss of the current data center;
- There will be adequate storage to recover systems;
- District data is housed at a district data center and backed up in the cloud;
- District data is hosted by 3rd party providers;
- In the event of a critical failure to network infrastructure in the data center, District networking may be significantly impacted.

Disaster Recovery/Critical Failure Team

Shaker Regional has appointed the following people to the disaster recovery/critical failure team: Director of Information Technology, Network System Administrator, and Systems Support Specialists.

In the event the TDRP is activated, overall management of the response is delegated to this team. Their primary responsibilities include:

- Determining the impact of the natural disaster/critical failure.
- Communication of impact and or loss, and updates of progress to the Superintendent.
- Communication of outages and updates to district employees.
- Oversight of the TDRP implementation and restoration of critical systems and data.
- Working with manufacturers and/or vendors during the recovery and restoration of critical systems and data.
- Oversight of TDRP implementation debrief.

Activation

The TDRP will be activated in the event of the following:

- A natural disaster has occurred and affects the operation of the district's data center. A natural disaster includes, but is not limited to, the following: tornado, earthquake, lightning, and flood.
- A fire has impacted the data center.
- Water or flooding has impacted the data center.
- Critical system failure.

The Information Security Officer (ISO) will act as the Incident Response Manager (IRM). If the ISO is not able to act as the IRM, a member of the District Administrative Team will assume the role of IRM, with assistance from the Incident Response Team (IRT).

Notification

The following groups will be notified in the event the plan has been activated:

- Superintendent
- District Administration
- Technology Employees
- District Employees
- Parents and Students
- Vendors

Information will be disseminated to the above groups through whichever means of communication is available at the time. This could include any one or combination of the following:

- Phone
- Email
- Social Media/Website
- Radio or Television

The TDRP team will work with the Superintendent on which information will be conveyed to each above group and what means will be used.

Implementation

The TDRP team has the following in place to bring the district back online in the least of amount of time possible:

- Maintained spreadsheet listing all server names, physical and virtual, and their function. A
 hard copy of this document will be secured at the technology office. An electronic version
 will be housed on Google Drive.
- Maintained secure application to store all system administrator accounts, passwords, and vendor contact information. This will be accessible only to applicable technology staff who need access to perform their job functions.
- The District's data backup solution includes the use of a backup manager and off-site file storage, which backs up data locally in the data center and the cloud. The district's critical virtual servers can be run directly from the cloud with limited access.
- In the event of a critical system failure, the district can restore that server back to our current environment from the backup solution.

Deactivation

The TDRP team will deactivate the plan once services are fully restored.

Evaluation

An internal evaluation of Shaker Regional's TDRP response will be conducted. This will entail gathering documentation from the response and feedback from all stakeholders and incorporate into an after-action report and corrective action plan. The result will be an update to the TDRP and other emergency response plans as appropriate.

Appendix N

Data Breach Response Plan

Objectives

The purpose of the Technology Data Breach Plan (TDBP) is to enable the Shaker Regional School District (Shaker Regional) to respond effectively and efficiently to an actual or suspected data breach involving personally identifiable information (PII), confidential or protected information, district identifiable information, and other significant cybersecurity incident. The objectives of the TDBP are:

- Convene the Incident Response Team (IRT) as necessary;
- Validate and contain the data security breach;
- Analyze the breach to determine scope and composition;
- Minimize impact to the employees and students after a data breach has occurred;
- Notification of data owners, legal counsel, state/federal agencies and law enforcement as deemed necessary.

Planning Assumptions

The following planning assumptions were used in the development of Shaker Regional's TDBP:

- There may be data breaches that will have greater impact than others.
- There will be factors that are beyond the department's control or ability to predict during a data breach.
- District data is backed up.
- Some district data is hosted by 3rd party providers.

Data Breach/Incident Response Team

Shaker Regional has appointed the following people to the data breach/incident response team: Director of Information Technology, Network System Administrator, and System Support Specialist.

- In the event the TDBP is activated, overall management of the response is delegated to this team. Their primary responsibilities include:
- Determine the nature of the data compromised and its impact to employees, students, and the district itself;
- Communicate impact, the number of affected individuals, the likelihood information will be or has been used by unauthorized individuals, and updates of progress to the Superintendent and Business Administrator;
- Coordinate with the Superintendent to ensure communication with district employees and or parents as deemed appropriate;
- Oversight of the TDBP implementation and data breach resolution;
- Work with vendors, 3rd party providers, manufacturers, legal counsel, district data breach insurance provider, state/federal agencies, and law enforcement while correcting the data breach and its repercussions;
- Oversight of TDBP implementation debrief.

Activation

- The TDBP will be activated in the event of the following:
- A data breach has occurred and affects the district itself. A data breach includes, but is not limited
 to, an incident in which sensitive, protected, or confidential data has potentially been viewed,
 stolen, or used by an individual unauthorized to do so;
- Personal Health Information (PHI) has been compromised;
- Personally Identifiable Information (PII) has been compromised;
- Confidential or sensitive data has been compromised:
- Network hack/intrusion has occurred.

The Information Security Officer (ISO) will act as the incident response manager (IRM). If the ISO is not able to act as the IRM, the Business Administrator will assume the role of IRM, with assistance from the IRT. The breach response and reporting process will be documented according to state and federal requirements. The Director of Information Technology will work with the Superintendent to dispense and coordinate the notification and public message of the breach.

Notification

The following groups will be notified in the event the plan has been activated:

- Superintendent
- District Administration
- Technology Employees
- District Employees
- Parents and Students
- Vendors

Information will be disseminated to the above groups through whichever means of communication deemed appropriate. This could include any one or combination of the following:

- Email
- Social Media/Website
- Radio or Television
- Written Notice
- Phone

The TDBP team will work with district leadership on which information will be conveyed to each above group, the timing of that communication and what means will be used.

Implementation

The TDBP team has the following processes in place to contain the data breach in the least of amount of time possible:

- Data inventory of all systems containing sensitive data. A hard copy of this document will be secured at the technology office. An electronic version will be housed on the Technology Department's Team Drive.
- Data dictionary of all district-hosted information systems. A hard copy of this document will be secured at the technology office. Due to non-disclosure agreements, this data may not be available in other locations/formats. The appropriate vendor(s) can be contacted for this information.
- Maintained spreadsheet listing all server names, physical and virtual, and their function. A hard
 copy of this document will be secured at the technology office. An electronic version will be housed
 on the Technology Department's Team Drive.
- Maintained secure application to store all system administrator accounts, passwords and vendor contact information. This will be accessible only to applicable technology employees, who need access to perform their job functions.
- The district's data backup solution includes the use of a backup manager and off-site file storage, which backs up data locally in the data center and offsite.

The following will take place during the incident response:

- The members of the IRT will be assembled once a breach has been validated. The IRT will be comprised of the Director of Information Technology, Network System Administrator, and Systems Support Specialist. Additional members of the Shaker Regional School District's administrative team and technology department may be designated to assist on the IRT.
- The IRT will determine the status of the breach: ongoing, active, or post-breach. For an active

- and ongoing breach, the IRT will initiate appropriate measures to prevent further data loss. These measures include, but are not limited to, securing and blocking unauthorized access to systems/data and preserving any and all evidence for investigation.
- The IRT will work with the data managers and data owners to determine the scope and composition of the breach, secure sensitive data, mitigate the damage that may arise from the breach, and determine the root cause(s) of the breach to devise mitigating strategies and prevent future occurrences.
- The IRM will work with legal counsel, the Superintendent and the Business Administrator to determine the appropriate course of action pursuant to state statute. This includes notification of the authorities and local law enforcement.
- Collaboration between the authorities and the IRT will take place with the IRM. The IRT will
 work with the proper authorities to make sure any and all evidence is properly handled and
 preserved.
- On advice from legal counsel, an outside party may be hired to conduct the forensic investigation of the breach. When the investigation has concluded, all evidence will be safely stored, recorded, or destroyed (where appropriate).
- All affected data, machines, and devices will be identified and removed from the network as
 deemed appropriate for the investigation. Interviews will be conducted with key personnel and facts
 of the incident will be documented and the evidence preserved for later examination.
- The IRT will work with the Superintendent's office to outline the notification of the data owners and those affected. Communication will be sent out as directed by legal counsel and advised by the district administrative team. The types of communication will include, but are not limited to, email, text message, postal mail, substitute notice, and/or phone call.
- The IRM, in conjunction with the IRT, legal counsel, the Superintendent, and Business Administrator will determine if notification of affected individuals is necessary. Once the determination is made to notify affected individuals, a letter will be written in accordance with all federal and state statutes and local procedures. If it is determined that identity theft or other fraud is not reasonably likely to occur as a result of the breach, such a determination shall be documented in writing and filed at the Superintendent's office.

Deactivation

The TDBP team will deactivate the plan once the data breach has been fully contained.

Evaluation

Once the breach has been mitigated, an internal evaluation of Shaker Regional's TDBP response will be conducted. The IRT, in conjunction with the IRM and others who were involved, will review the breach and all mitigation steps to determine the probable cause(s) and minimize the risk of a future occurrence. Feedback from the responders and affected entities may result in an update to the TDBP and other emergency response plans as appropriate. Information security training programs will be modified to include countermeasures to mitigate and remediate previous breaches so that past breaches do not recur. The reports and incident review will be filed with all evidence of the breach.

Appendix O

Application Inventory

Name	Users	Website Link
Office 365	all users	
Veem	Backup	
Adobe CC	All users	
Profund	SAU,Admin Assist.	
SNAP	Nurses	
	Food Service, Business	
Nutrikids	Office	
Audacity	All Users	
Google earth	All Users	
VLC Media Player	All Users	
Office 2016	All Users	
google chrome	All Users	
Smart Learning suite 19	All Users	
Tight VNC	IT/Installed on All PC's	
Solid Works	CAD	
Windows photo Viewer	All Users	
Windows Movie Maker	All Users	
puTTY	IT	
KeePass	IT	
Arduino	BMS STEM	
TInkerCAD	BMS STEM	
Cura	BMS STEM	
	BMS STEM/BHS	
Microsoft Flight Simulator	STEM	
FOG	IT	
Eclipse	Coding	
LadyBug	STEM	
Cube Pro	STEM	
Python	STEM	
DOS Box	STEM	
SNIPE IT Asset Management	IT	
Spiceworks	IT	
kissFlow	SAU	
PDQdeploy	IT	
PDQInventory	IT	
Barkely Rapid Visor	School Administration	
Chrome OS US English Female		
HQ	All Grades	https://policies.google.com/terms?hl=en
Accelerated Reader	All Grades	https://www.renaissance.com/terms-of-use/
Alexandria	All Grades	http://www.goalexandria.com/terms-of-use/
Americaslibrary.Gov	All Grades	
Animoto	All Grades	https://animoto.com/legal/terms
Animoto For Education	All Grades	https://animoto.com/legal/terms
Annenberg Learner Interactives	All Grades	

Blended Play	All Grades	https://animoto.com/legal/terms
Classcraft	All Grades	https://www.classcraft.com/teacher-license-agreement/
Classhook	All Grades	https://www.classhook.com/terms_of_use
Clever	All Grades	https://clever.com/about/terms
Common Core Sheets	All Grades	nups., et
Digital Public Library of	Tim Grades	
America	All Grades	https://dp.la/about/terms-conditions
Discovery Education Techbook	All Grades	http://www.discoveryeducation.com/aboutus/terms_of _use.cfm
Ebsco Host	All Grades	
Ebschost Databases	All Grades	
Edpuzzle	All Grades	https://edpuzzle.com/terms
Empower Learning	All Grades	
Engineer Girl.org	All Grades	http://nas.edu/legal/terms/index.html
Englishlinx	All Grades	
Epic Books	All Grades	
Fablevision Learning	All Grades	
Factcite	All Grades	
Flipgrid	All Grades	https://legal.flipgrid.com/terms-of-use.html
Const. Character (E.L.)	A11 C 1	https://gsuite.google.com/intl/en/terms/education_term
Google Classroom (Edu)	All Grades	s.html
Google Docs	All Grades	https://policies.google.com/terms?hl=en https://gsuite.google.com/intl/en/terms/education_term
Google Docs (Edu)	All Grades	s.html
Infobase Learning	All Grades	
Iready	All Grades	
IXL Math Practice	All Grades	https://gsuite.google.com/intl/en/terms/education_term s.html
Kahoot	All Grades	https://getkahoot.com/info/terms-and-conditions
Kahoots	All Grades	https://kahoot.com/terms-and-conditions/
Kennedy Center Arts Edge	All Grades	http://www.kennedy-center.org/pages/legal/terms
Khan Academy	All Grades	https://www.khanacademy.org/about/tos
KidBlog	All Grades	https://kidblog.org/home/terms-of-service/
Lego Education Webo 2.0	All Grades	https://www.lego.com/en-us/legal/legal-notice/terms- of-use-for-apps
Math Facts Pro	All Grades	
Math Trainer	All Grades	
Microsoft Onedrive	All Grades	https://www.lego.com/en-us/legal/legal-notice/terms- of-use-for-apps
Mystery Doug	All Grades	https://mysterydoug.com/terms
Mystery Science	All Grades	https://mysteryscience.com/terms
National Geographic.com	All Grades	https://www.nationalgeographic.com/legal/terms/
Nearpod	All Grades	https://www.nearpod.com/terms-conditions/
Newsela	All Grades	https://newsela.com/pages/terms-of-use/
Padlet	All Grades	https://padlet.com/support/padlets_privacy
Pebble Go Next	All Grades	https://www.lego.com/en-us/legal/legal-notice/terms- of-use-for-apps
Pebblego	All Grades	https://www.lego.com/en-us/legal/legal-notice/terms- of-use-for-apps

Powtoons	All Grades	
Procon.org	All Grades	
Quizlet	All Grades	https://www.lego.com/en-us/legal/legal-notice/terms- of-use-for-apps
Readaloud (readaloudsite.wordpress.com)	All Grades	
Readwritethink.org	All Grades	
Remind	All Grades	https://www.remind.com/terms-of-service
Renaissance Learning	All Grades	https://www.renaissance.com/terms-of-use/
Robot Mesh	Grades 5-8	https://www.robotmesh.com/terms-of-use
Scholastic News	All Grades	http://www.scholastic.com/terms.htm
Scratch	All Grades	
Screen Castify	All Grades	https://www.screencastify.com/terms
Smithsonian History Explorer	All Grades	https://www.si.edu/termsofuse/
Spelling City	All Grades	http://www.spellingcity.com/terms-of-service.html
Sphero	All Grades	https://www.sphero.com/terms
Star Math	All Grades	
Star Reading	Pre K - 4	https://www.renaissance.com/terms-of-use/
Storyboard That	All Grades	http://www.storyboardthat.com/about/terms-of-use
Sutori	All Grades	https://www.sutori.com/terms-of-use
Twistedwave	All Grades	https://twistedwave.com/tos
Ushistory.org	All Grades	
Web2School	All Grades	http://wickedgoodsoftware.com/WGS-TOS.html
Wevideo- Video Editor	All Grades	https://www.wevideo.com/terms-of-use
Wevideo for Schools	All Grades	https://www.wevideo.com/terms-of-use
Whitehouse.gov	All Grades	
Wordart.com	All Grades	https://wordart.com/terms
World Almanac For Kids	All Grades	
World Book Online	All Grades	http://www.worldbookonline.com/myaccount/terms
Worldbookonline.com	All Grades	http://www.worldbookonline.com/myaccount/terms
Youtube	All Grades	https://policies.google.com/terms
Youtube	All Grades	https://policies.google.com/terms