

**Lake Washington School District
Executive Limitation Monitoring Report**

**EL-14 Technology
June 10, 2019**

Executive Limitation: The CEO shall establish and maintain technology systems and applications consistent with accomplishment of the Board’s End Results.

Accordingly, the CEO shall:

1. Provide a comprehensive technology plan that directs the priorities and outcomes for the expenditure of technology resources.

In
Compliance



Evidence

Overview

A comprehensive technology plan is developed and implemented in alignment with the 2018 capital technology levy in service to the district mission, vision and goals. The technology plan operationalizes the district’s commitment to: keep pace with technology innovation that supports student learning and staff effectiveness; develop and scale support systems and infrastructure to meet the needs of our staff, students, and parent users; and, to ensure consistent, safe and secure network reliability.

During 2018-2019, year one of the technology operations four-year levy plan was executed. Highlights include:

- Completed the implementation of the district-wide network and voice projects and “fine-tuned” areas where quality assurance review indicated. These efforts spanned three years and were funded by the 2014 capital technology levy to increase speed, resilience, access and communication district-wide, including remote access for students and staff from home or offsite locations.
- Completed transition of all sites to network managed services for 24x7 coverage for monitoring, reporting, and threat mitigation.
- Continued with the “rolling” implementation of new SMART interactive panels in all but seven elementary schools and began piloting secondary panels in one middle and one high school. Timberline Middle will be outfitted with new classroom equipment this summer.
- Completed RFI process to identify a new 5th grade one to one student laptop and to update student laptops (for grades 6 and 9) that are more powerful, lighter in weight, and provide digital inking.
 - Piloted 5th grade one to one device and teaching model in four schools – Lakeview, Rockwell, McAuliffe, and Mann and conducted professional development for teachers on mobile teaching.
 - Documented pilot classroom management and teaching guidelines for August LEAP professional development 5th grade classroom roll out in September 2019 based on teachers’ and administrators’ pilot experiences.
 - Changed brands from Hewlett Packard (HP) to Dell for 6th and 9th grade student laptops as Dell performed better than all other models in the review process and HP had availability challenges that were too risky for meeting start of school requirements.
- Designed bid specifications, conducted RFI, and developed district standards (safety, camera software and equipment), and began implementing middle and choice school security cameras. This also includes converting existing high school systems to the new standard. Implementation of these projects will be completed by end of August 2019.
- Completed the second full year of the district wide Software and Web Application Request Process. The process provides a consistent, trackable, and supportable method for new digital content and instructional tools that are compatible with existing systems, in alignment with standards, and in compliance with student privacy and safety regulations. Added a CTE specialized hardware pilot to this process at the request of the CTE director. The process is in design and will be tested in 2019/20.

EL-14 Technology

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Evidence {continued}

- Completed migration of the staff portal to the FinalSite website platform.
- Provided direct support and project management for the district's new professional learning management system, Cornerstone and handed off on going management to the professional learning department.
- Launched a district-wide initiative to streamline the use of digital platforms for collaborating, sharing content, and accessing information. This initiative, Collaboration, Content and Information Access (CCI) will exploit the powerful functionality of Office 365. It also targets replacement of a waning learning management system, PowerSchool, with a better solution for classroom management, parent and student engagement, and digital content delivery. A derivative of this effort will also be process and workflow analysis, improvement, design, and automation. Completion is targeted for 2020/21.

2. Provide a comprehensive and functional technology infrastructure that addresses needs of staff, students, and community.

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Compliance



Evidence

The goal is to ensure that the Lake Washington technology infrastructure is robust, functional, and comprehensive. Achievement of this goal requires ongoing commitment to stringent technology standards; provision of adequate technical support; and, adherence to a realistic, consistent, and appropriate schedule for upgrading technology equipment through voter approved technology levies.

Network Infrastructure

The district's Wide Area Network (WAN) is segmented between physical and wireless connectivity for endpoints that connect to a fiber-optic network that carries traffic from schools and buildings to the data center and out to the cloud or internet.

Internet Bandwidth

The district's available internet bandwidth was tripled in 2015 to 4 Gigabits (4096 Megabits) per second. The District's burst or short-term capacity is 22 Gigabits per second. Work to make the available bandwidth capacity expandable was completed in September 2015 (expandable up to 22 dedicated Gigabits).

- Average daily used bandwidth in the districtwide, as of March of 2019, was 1.3 Gigabits ongoing, with spikes as high as 2 Gigabits.
- Average used bandwidth increased nearly 15% in the last twelve months and continues to grow as shifts from paper to digital content and business processes continue to increase.
- A multi-year physical network upgrade was completed in the summer of 2018 with additional fine tuning over the 2018/19 school year.

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Compliance



Evidence {continued}

Physical Network (aka Wired Network)

The physical network connects all current sites run on fiber optic cable owned by the district. As of the 2018 there are now 10 (gigabit per second) connections from the Resource Center to all other sites.

The district maintains a Wide Area Network that contains 1,670 network switches and routers, up from 1,260 last year due to growth and network resource demands.

- A capital levy project to update network devices that provide physical connectivity to endpoints and wireless access points was completed last summer. Three remaining schools, JHS, Kirk and Mead will be upgraded with the completion of construction.

Wireless Network

The wireless network currently includes 2,260 wireless access points (WAP) that provide coverage at all locations in the school district. Each classroom/area is outfitted with an access point rated to support 25 devices. Each access point can overlap zones to balance connections.

- A project that began in January 2016 to upgrade all existing wireless access points to a modern cloud-based system was completed in August of 2018. Coverage and capacity is reviewed and adjustments are being made this year.

Data Center Infrastructure

The data center is located at the Resource Center. The data center supports physical and cloud servers as well as other shared technical systems. The district is working to reduce reliance on physical servers and many district servers have been moved to cloud services. The migration of physical servers to cloud services started in 2016 and is scheduled to complete by 2020 along with consolidation efforts. The data center infrastructure includes:

Servers

The district currently maintains 224 servers plus a dozen other network appliances. The goal is for 80% of our servers to be virtualized and/or moved into the cloud to reduce total cost of ownership and improve disaster recovery and survivability.

- Work is continuing toward the goal of 80% virtualization as well as upgrading any at-risk hardware. Currently, 79% of the servers have been virtualized using Microsoft Hyper-V technology and Azure Cloud services.
- Seventeen servers are now hosted on Microsoft Azure hosted cloud space.

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In
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Evidence {continued}

Storage

The district has six storage systems deployed in the data center including:

1. A StorSimple device with 10 Terabytes (TB) of on premise tiered storage. Tiered storage provides solid-state fast storage for high-access data, slower storage for intermittently accessed data, and 300TB of cloud storage for archival data. This device is slated to be retired by August 2019.
2. A Hewlett Packard Enterprise Virtual Array (EVA) holds 37 Terabytes (TB) of data and is used primarily for high-access databases and virtual server storage.
3. A Dell network-attached storage with 16 TB of data with planned decommission in 2018-19.
4. An older Hewlett Packard modular smart array with 8 TB with planned decommission tied to the completion of the project to refresh Staff, Student, and Parent portals.
5. A StorSimple 8100 with 18 TB of local storage has built-in deduplication and compression and now connects with to 300TB in the cloud for archives and backups. It automatically replicates to the Microsoft Azure cloud for offsite disaster recovery needs. District, student, and staff personal files were moved to Office 365 cloud storage in 2014.
6. A sixth HP 3Par storage device that holds 100 TB was added to consolidate server and database storage of older storage devices in February 2016.

A consolidation project continues which will reduce reliance on on-premise servers. Completion was planned for Fall 2017, but was delayed as the District develops its Azure cloud strategy and completed its migration to Office 365 of shared department folders and portal modernization. It is now slated for completion in 2019.

Active Directory

Microsoft Active Directory (AD) is the user account authentication authority used in the district computer network. Active Directory accounts provide authorized users access to district technology systems such as email, portals, applications, and web-based resources. Six Windows Server Domain Controllers are deployed to manage the enterprise level technology environment. Following best practice, one of these servers is physical and the others are virtualized. Accounts for every staff member and student in the district are currently supported. In addition, a limited number of accounts for authorized contractors and vendors are managed. Currently 52,027 accounts reside on the lwsd.org domain, compared to 38,654 last year. Parent accounts are maintained in a separate domain. There are currently 44,416 active parent accounts compared to 21,000 last year. Student and parent account provisioning is automated, but staff provisioning remains partially manual due to complexities of individual functions and needs.

- Development work continues to move to Microsoft’s Azure Active Directory cloud solution.

E-Mail

The District utilizes Microsoft Office 365 for e-mail. Users can access their e-mail using Outlook online or as a local client on their District computer device. Last year District Exchange Online servers processed close to 39.2 million e-mail transactions, up from 32 million last year.

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Compliance



Evidence {continued}

Software Provisioning

Increased demand for software titles and the move to mobile devices for students has required changes in how software is provisioned. Previously, much of the software provisioning was done manually or over the wired network and in lab environments. These changes require that most software is either web-based or can be installed over the network. Reconfiguration of Microsoft’s System Center Configuration Manager (SCCM) was completed to provision software for endpoint devices.

This system is capable of network-delivered imaging and software deployment. SCCM also assists with license tracking and compliance as well as provides access to software by user role and need. Software can be pushed to devices or provisioned in a manner that enables users to “pull down” available software and install it to their own device through our “Software Center.”

In 2016-17, a Software and Web Application Request Process was created and implemented. This year was the second full cycle of the process. Through this effort, in addition to curricular alignment approval by directors, Technology Operations project management logs requests, documents approvals and licenses, develops the computer image(s), and conducts user-testing for software needs. This process and the use of SCCM for provisioning users is particularly important for programs requiring specialized software such as Career and Technical Education (CTE), STEM Courses, Graphic Arts, and State Assessment Secure Exam Browsers. An adaptation to the process is being piloted this year to include hardware approvals for specialized CTE equipment where demand has skyrocketed under the new director of college and career readiness and plans to review and refresh old CTE classroom equipment.

Data Backup & Recovery

School and financial records in the Skyward system are secured by the Washington State Information Processing Cooperative (WSIPC). Local servers and databases, including web pages and the portal, are secured through HP Data Protector and stored on the tape library or local storage. The most critical data is currently being backed up using Microsoft Data Protector which creates backups to disk and then archives them to the cloud. Less critical data is backed up using manual snapshots to disk storage within the data center which could be lost in the event of a disaster.

Core business systems have been migrated to the cloud to provide back-up for critical business systems, such as WSIPC student and fiscal information systems, e-mail and document storage.

Technical Security Infrastructure

Certain technologies are deployed to safeguard the district’s network and technology resources from unauthorized access, nefarious activity, and inappropriate content.

Access Security

Microsoft Active Directory is the authentication authority for the district’s computer network. All staff and students in grades K-12 are issued accounts.

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In
Compliance



Evidence

- Password policy changes were implemented in 2017 in line with current State requirements. These changes are planned as part of the move to Microsoft’s Azure Active Directory cloud solution and includes a password self-service portal completed in May 2018. Federal and State guidelines continue to evolve around access security best practices.
- Implemented Microsoft AppLocker to further secure student laptops from intrusion and non-educational use.

Network Intrusion Security/Firewall

The District deploys a defense in depth concept with layers of network security. The network architecture is designed to protect the district’s computing network through the use of standard hardware and software. Two Palo Alto Network (PAN) firewalls are used to prevent unauthorized network access from the Internet.

In the winter of 2019, technical operations put Microsoft’s Local Administrator Password Solution (LAPS) in place to further secure the Districts computer workstations from intrusion by unauthorized personnel. This is part of the “East-West “security foundation and defense in-depth strategy. This protects intrusion within the district network from spreading across locations internally.

Web Filtering

Two Palo Alto Network appliances are used to filter all network traffic leaving for the internet. These devices support district compliance with Children’s Internet Protection Act (CIPA) regulations. Six Direct Access servers support staff laptops and secondary student one to one devices to re-direct web traffic back through the LWSD network so that web content is filtered when student devices are not connected to the district network, making the student experience very similar to being at school.

Malicious Traffic Detection

The Palo Alto Network (PAN) devices also provide deep packet analyzing to detect and filter network packets that are not authorized to pass between our network and the internet. This device blocks malware activities as well as nefarious software, such as illegal file sharing software and security bypass software.

- Microsoft advanced threat protection was deployed in December 2016 to provide protection against known malware and viruses, malicious URLs, and to provide click tracing to help identify sources of attempted nefarious activity. This is the same protection Microsoft Corporation uses internally. Microsoft is the second most attacked entity in the world, next to the federal government.
- PhishHunter was added in 2017 for additional threat protection. It is a set of tools and reports in the Microsoft ecosystem to combat phishing attempts. This assists LWSD technical staff in identifying high priority phishing scams as well as breaches.

Anti-Virus

The district deploys Microsoft Endpoint Protection to all its servers and endpoint devices. This anti-virus protection solution is managed centrally by Microsoft’s System Center Configuration Manager (SCCM).

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In
Compliance



Evidence {continued}

Network Access

District staff and students are provided network access through district-owned and configured equipment. Guest users are informed by the web gateway of the Terms and Conditions of use for the guest wireless network and must click to accept the terms before being granted access.

Staff and Student Technology Equipment

A significant amount of technology equipment has been deployed in classrooms to facilitate learning and support district operations. Our staff and student technology consists of the following:

Classroom Projection: A multi-media capable laptop connected to a docking station and other teaching equipment that displays lesson material upon a viewing surface/screen.

Interactive Boards: A wall-mounted device that allows teachers and students to create and display interactive learning content. This device is connected to the docking station and controlled by the teacher laptop, either wired or wirelessly. Students can also connect their district issued laptops wirelessly to the new interactive boards. A multi-year replacement of older interactive whiteboards is under way with targeted completion in all classrooms during the 2018 capital technology levy.

Document Cameras: A digital display device that allows teachers to model processes/procedures and display artifacts, and documents through the interactive board.

Voice Amplification: A sound amplification system that uses either infrared or blue tooth technology to transmit the speaker’s voice and amplify it through ceiling or wall speakers.

Elementary Student Computer Devices: Carts of wireless laptops are deployed at either a 3:1 (grades K through 2) or 2:1 (grades 3 through 5) student-to-computer ratio. These shared carts are mobile and can be rolled into classrooms for use by individual students or for work in groups with multiple students accessing a single computer device. Implementation of 5th grade 1:1 laptop program is in a testing pilot program at four elementary schools and will be fully implemented district wide beginning in the 2019-2020 school year. These laptops convert to tablets and have digital inking capabilities.

Secondary Student Computer Devices: Individually-issued wireless laptops are deployed at a 1:1 student-to-computer ratio. These devices provide students access to electronic resources at home and school.

Library and Special Programs Computers: Standard computer allocations for library and special programs (ELL, Safety Net, and Special Education) are:

- 15 student-use computers per elementary libraries
- 2 student-use computers per 7 students for Special Ed (elementary only)
- 1 student-use computer per 10 students for Safety Net (elementary only)
- 4 student-use computers per ELL teacher (elementary only)

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Compliance



Evidence {continued}

Special Use Computers: Some programs such as CTE, Graphic Arts, Photography, and STEM use software applications that require more computing power than student issued laptops can provide. These programs budgets fund more powerful cart-based laptops and desktop computer labs.

Substitute Loaner Laptops: Laptops and charging carts were deployed to each school for substitute teachers to use docking stations and wireless/mobile teaching in the classroom. An evaluation of average and highest staff absences from the previous school year assisted in setting the allocations for each school as follows: Elementary Schools - 10; Middle Schools - 15 and High Schools - 20

Staff Computer Devices: All staff are provided access to a high end, laptop/tablet convertible device with a long battery life (upwards of 12 hours), digital inking and wireless projection capabilities; installed with Microsoft Windows 10 and Microsoft Office 365. Printers, email, and internet access are provided for conducting the business of the district. Staff computers are refreshed on a four-year basis.

CTE and Donation-purchased Student Computers

The technology operations department also supports 1,087 CTE program computers and 571 “add-on” student computers purchased through PTSA funds dispersed across several locations. CTE equipment is becoming more specialized and will soon require higher skilled support technicians to maintain the growing and aging of equipment in classrooms. While the generosity of the community is always appreciated, the challenge with PTSA funded student computers is the additional support and repair burden/costs that are unfunded through the donations process, and the community and school expectation that it will be replaced with district funds when the original equipment reaches end of life.

Technical Support

Providing technical support is an important component of an effective technology infrastructure. Technical support includes Technical Support Specialists (TSS), who staff the central-office Help Desk phones and manage the ticketing system and provide on-site support in schools. Current staffing levels provide 21 TSS who work at Helpdesk and in the schools; with secondary schools receiving 4 hours of onsite support each day and elementary schools received 2 hours per day of onsite support. Three Regional Technical Support Coordinators supervise TSS staff. Four Technical Solution Analysts handle tier 2 support, escalation tickets, and/or hardware repair processes. One Technology Messenger handles technology moves throughout the district.

Helpdesk hours are 6:30 a.m. – 5:00 p.m. weekdays during the school year. Hours are adjusted during summer months and school breaks to allow technicians to work together in the schools while staff and students are not in the buildings.

Other technology operations staff maintain and manage the technology infrastructure and networks, data center, applications and provisioning, voice systems, MAS program, onboarding new systems and software, and new technology procurement processes and deployment. Managed services are employed to assist in supporting computer image development and delivery of automated application needs and network management.

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Staff/Student and Parent Support

Help Central, an internal staff portal established in 2013-14, provides staff notifications and an alert section for known issues or outages to improve staff user support and promote customer self-service. The alerts for this school year were generally related to vendor supported curricular, classroom management, or third-party events rather than infrastructure issues. Alerts issued for the past several years are as follows:

- 2013-14 – 78 alerts posted
- 2014-15 – 26 alerts posted
- 2015-16 – 17 alerts posted
- 2016-17 – 28 alerts posted
- 2017-18 – 31 alerts posted
- 2018-19 – 28 alerts posted (2018-19 alerts are comprised of 3 Power School Learning issues, 10 third party vendor issues, 2 internet slowness issues, 2 staff and parent portal outages, 2 phone issues, 5 skyward issues and 4 other issues.)

Parent support is provided through email requests to ParentQuestions@lwsd.org. The most active time of the day for parents requesting help is between 5 p.m. and 7 p.m. on most weekdays. The service is provided by a third party for tier one and integrated into the district help ticket system and support model. Monthly volumes range by month. Data for the past four years shows high and low volumes as follows:

- 2015-16 High: 824 September Low: 70 April
- 2016-17 High: 496 September Low: 55 January
- 2017-18 High: 809 September Low: 62 December
- 2018-19 High: 608 September Low: 115 January

The service requests from parents were generally for information regarding changes in the online payment system, registration, and family access; and reflect improvements in our automation systems and the increase in student and family populations.

The number of help tickets opened by our internal customer base is higher this year and closure rates remained steady. These numbers reflect on site support efforts as technicians worked directly with teachers using docking stations that replaced aging presentation computers in the classrooms. Technical support focused on the new mobile teaching equipment and continued supporting and understanding the customers’ end-to-end experience for curricular and business applications-systems to ensure the software is provisioned and functioning correctly.

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Help ticket volume and closure rate stats for the past four years are shown in the following table:

Month	Total Opened Tickets				Total Closed by Helpdesk 1st Response*				% Closed			
	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
Sept	5,117	6,174	5,077	5,759	4,254	5,540	4,140	5,136	83%	90%	82%	89%
Oct	3,518	3,915	3,476	4,439	3,213	3,661	3,132	4,246	91%	94%	90%	96%
Nov	2,688	3,277	2,998	3,130	2,512	3,116	2,445	2,985	93%	95%	82%	95%
Dec	2,096	1,916	2,013	3,016	1,984	1,799	1,843	2,649	95%	94%	92%	88%
Jan	2,859	3,537	3,477	3,780	2,722	3,295	2,913	3,437	95%	93%	84%	91%
Feb	2,529	2,367	2,534	2,471	2,365	2,217	2,277	2,252	94%	94%	90%	91%
Mar	3,103	3,459	3,173	3,545	2,598	3,220	2,912	3,113	84%	93%	92%	88%
Apr	2,622	2,328	2,824	3,098	2,355	2,158	2,664	2,902	90%	93%	94%	94%
	24,532	26,973	25,572	29,238	22,003	25,006	22,326	26,720	91%	93%	88%	91%

*number of tickets closed by first response during a month

Customer support levels have remained steady, above the strategic goal of 85% 1st response closure, even with growth and opening new buildings. This is partly due to the addition of one technical support specialist this year to provide support to Barton and Baker elementary schools and Timberline in 2019/20.

3. Provide easily accessible, relevant, and current data to appropriate users to direct school and instructional improvement planning.	In Compliance	◀ ▶
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Evidence

Data for district and school continuous improvement planning is provided through the Skyward Student Information System and the district-developed interactive data visualization tool using power BI. This tool was introduced last year to provide district and school level views of disaggregated data for analysis. The Power BI data strategy and service, and a professional learning management system, Cornerstone, were implemented in Spring 2018.

Skyward, a student information system, is accessible to district personnel who interact with student demographic information, student and family contact information, attendance, discipline information, official transcripts, and graduation tracking. All teachers use Skyward’s grade book to record student grades and issue report cards. All teachers, office support staff, school administrators, and district administrators have access to the grade book system. The system is open to families, allowing for more timely communication and feedback between teachers, students and parents.

As part of the Microsoft Office 365 suite of applications, Power BI is used to analyze data and share insights. It allows the district to have one data visualization that principals can access through OneDrive. It also allows for quicker response to specific research questions by updating visualizations that may have already been created. District and School Administrators have access to data on CIP, Graduation Rates, Earned Credits, Dual Credit Enrollment, Student Growth Percentiles and more.

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In
Compliance



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OSPI’s Education Data System (EDS) is a secure web-based suite of applications accessible to district and building staff who manage assessments to ensure all students meet state requirements. It provides data to building and district staff on graduation data and assessment results for scheduling students and teacher information. Final assessment data in EDS is also imported into Skyward and is accessible to parents through Skyward Family Access.

Since its inception in 2009, the number of state reports dependent on CEDARS has more than doubled. Reports and processes through CEDARS reporting managed by technology data services staff include:

1. Adjusted Cohort Graduation and Dropout Annual Reporting (P210)
2. Annual Behavior and Weapons reporting
3. Annual CTE Student Enrollment Review (P210VOC)
4. Annual Unexcused Student Absence reporting
5. Certificate of Academic Achievement/Certificate of Individual Achievement Status Listing
6. Direct Certification Free Lunch
7. Discipline Summary reporting
8. Dual Credit annual reporting
9. EdFacts Reporting (Federal)
10. Eligibility for State-funded Full Day Kindergarten programs
11. English Language Learners (ELL) Legislative Report
12. Enrollment information used in the allocation of applicable Federal programs
13. Gifted/Highly Capable Program End of Year reporting
14. High Poverty School determination for National Board Certification salary bonus
15. Educator Equity Data report (Formerly Highly Qualified Teacher report)
16. Homeless Children and Youth reports, including McKinney-Vento
17. Homeless End of Year reporting
18. K-3 High Poverty
19. K-4 Literacy
20. LAP Funding Data
21. LAP Program Student Growth and End of Year reporting
22. Medicaid Eligibility Rate
23. November Special Education Federal Child Count Report
24. November Special Education Federal Least Restrictive Environment (LRE) Report
25. October Public School Enrollment Count
26. Online Provider Accountability Data and Reports
27. Principal and Teacher Evaluations
28. Safety Net Application
29. Special Education Federal Allocations based on October Public School Enrollment Count

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Evidence (continued)

- 30. State Board Accountability Index
- 31. Title I Program End of Year reporting
- 32. Title III Immigrant student eligibility for federal funding
- 33. Transitional Bilingual reports
- 34. Updating the MSIS database managed by MS DR for Migrant Reporting
- 35. Washington State Report Card (via Tableau Server)

<p>4. Provide for a safe and secure computing environment for students and staff that:</p> <ul style="list-style-type: none"> a. Prohibits the use of technology resources for commercial, political, illegal, or indecent purposes or that disrupts the learning environment of students; b. Prohibits access to personal information about students or staff that does not have an educational purpose or that is not appropriately authorized; c. Prohibits collection of electronic information for which there is no legitimate need; and d. Uses methods of collecting, reviewing, transmitting, or storing information that protect against improper access to the information being elicited. 	In Compliance	◀ ▶
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Evidence

Safety of our students and staff is a high priority. Technologies that provide security are carefully selected to ensure that students and staff are not vulnerable to inappropriate material, fraudulent behavior, and/or malicious activities that inhibit the appropriate use of district resources. These technologies are also selected and updated based on compliance with student privacy law and regulations.

An Acceptable Use Policy (AUP) includes guidelines for internet safety and for the appropriate use of district computer networks. The AUP is included as a component of each school’s student handbook. The AUP is reviewed annually with all staff and students. Students must acknowledge responsibility for understanding the AUP every time they log on to a district computer. Students who violate the AUP are subject to the consequences, specified in the AUP and discipline policies.

In 2016-17, the Technology Department further enhanced security and performance by upgrading and adding a second “next generation firewall” that analyzes computer traffic blocking Peer to Peer Applications (BitTorrent) and Internet Anonymizers (proxy avoidance). This upgrade was required to meet the traffic demands of the growing digital footprint and allow enough bandwidth to accommodate several hundred simultaneous state testing sessions without disruption. In 2017-18 additional layers of safety and security were added as follows:

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<p>4. Provide for a safe and secure computing environment for students and staff that:</p> <ul style="list-style-type: none"> a. Prohibits the use of technology resources for commercial, political, illegal, or indecent purposes or that disrupts the learning environment of students; b. Prohibits access to personal information about students or staff that does not have an educational purpose or that is not appropriately authorized; c. Prohibits collection of electronic information for which there is no legitimate need; and d. Uses methods of collecting, reviewing, transmitting, or storing information that protect against improper access to the information being elicited. 	<p>In Compliance</p>	
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Evidence (continued)

- Cisco Identify Services Engine (ISE) is being deployed in coordination with the network upgrade. When fully deployed, it will provide network access control that helps protect the district network from unauthorized device access. This system detects devices attached to the network and automatically assigns them to the proper virtual network.
- Microsoft AppLocker to further secure student devices from intrusion and non-educational use.
- PhishHunter, a set of tools and reports, to the Microsoft O365/Azure ecosystem to combat phishing attempts.
- Legal reviews of critical processes and software/web application for compliance with student privacy and guidance for staff to screen software requests and web apps for student safety.

The district collects personal information as part of student and human resource applications in Skyward. Personal information about staff or students is only provided to those users that have a legitimate educational need and have appropriate permissions. Employment or current contractual status is verified through the Human Resources Department. Appropriate administrator approval processes are followed prior to granting access to student and/or staff information. Transmission of student information required by the state is done through the Comprehensive Education Data and Research System (CEDARS), which provides for weekly submission of electronic student information through a secure process managed by the Washington School Information Processing Cooperative (WSIPC). Transmission of staff data to the state is also managed by WSIPC.

The district must comply with the Family Educational Rights and Privacy Act (FERPA). The Student Information System contains privacy fields for tracking parent permissions pertaining to the release of student information. District policy is published on the district’s website and staff members are trained to use these privacy fields for appropriate data requests and release of student information.

Any external requests for research data, surveys, or other measures that may impact students or teachers must be approved by the Superintendent or designee as described in Policy LC, Relations with Education Research Agencies.

EL-14 Technology

Executive Limitation: The CEO shall establish and maintain technology systems and applications consistent with accomplishment of the Board’s End Results.

Accordingly, the CEO shall:

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

In
Compliance



Evidence (continued)

Requests for information under Policy KBA, Public’s Right to Know, as well as public disclosure laws are made through the communications department. Staff works with legal counsel when requests include personal information of staff or students.

Security protocols also help protect personal information. Policies are in place to assure that users are given appropriate and necessary access levels to district systems. Employees that resign or are terminated have their access to the LWSD network revoked when their employment ends. All K-12 grade students are provided with individual student log-on identifiers to protect their files from other students. All Internet traffic requires authentication following security protocols (e.g. SSL – Secure Socket Layer) to ensure that information is secure.

I certify the above to be correct as of June 10, 2019.

Jane Stavem, Superintendent