

Issaquah School District
Executive Limitations Monitoring Report
April 22, 2021
EL-15 TECHNOLOGY – Annual Internal Report

The Superintendent certified that the District is in compliance with EL-15 with no exceptions.

The Superintendent shall not fail to establish and maintain technology systems and applications consistent with the accomplishment of the Board's Ends.

Accordingly, the Superintendent shall not fail to:

1. Provide equitable access to technology throughout the district.

Interpretation:

I interpret this to mean that district administrative leadership in collaboration with the Educational Technology Department and IT/Infrastructure Department shall have a system-wide process for assuring equal access to technology through the district.

Evidence of Compliance:

Each year the district implements replacement cycles at each school. Computers/laptops are on a five-year replacement cycle (Board directed). In the late spring/early fall, School Technology Teams are provided with the amount available to them for their replacement cycle. The School Technology Teams select the district-standard replacements for their school that best suit their school's needs. School Technology Teams also allocate classroom laptops, tablets, non-classroom computers, electronic response systems within their school.

Other equipment on replacement cycles include document cameras, and projectors. Those are replaced as needed and managed by the school's Technology Specialist.

Additional Technology Levy allocations are provided to each school for libraries (\$5,000 elementary, \$10,000 secondary) non-classroom computers (4 elementary, 6 middle school, 8 high school), and for School Technology Teams (\$10 per FTE) to spend on printers, online subscriptions and other additional district-standard items in their school specifically to improve student learning. Schools use our Digital Resource Request process to request approval of online subscriptions. The process along with the list of approved tools can be found on our Ed Tech [website for staff](#).

An additional replacement cycle may be made in the spring if other Tech Levy line items allow.

[Tech Levy 2019-2022 Board Summary - Capital Levy: Technology Springboard Proposal](#)
(FY 2019-20)

Each classroom includes a teacher desktop and document camera connected to a projection device. The table below shows the ratio of students to computers as of April 1, 2019, plus additional equipment available to staff and students.

School	FTE as of 3/2/2020 - COVID-19	Instructional desktops & laptops-classrooms, labs, library	Instructional laptops	Instructional desktops	Ratio: Students to Instructional Computers	Tablets	Non-classroom computers	Electronic Student Response Systems	Doc Cams	Projectors	Interactive tech - ACTIVboards & Proj.
AP	616.30	604	431	173	1 : 1	236	128	10	48	45	36
BW	694.54	635	453	182	1.1 : 1	161	131	11	54	19	43
CA	501.00	536	373	163	0.9 : 1	104	114	17	41	38	33
CH	603.81	520	476	44	1.2 : 1	82	121	19	35	39	32
CL	785.89	523	492	31	1.5 : 1	159	157	3	59	1	50
CR	586.96	645	505	140	0.9 : 1	242	92	3	37	27	38
CS	734.14	537	404	133	1.4 : 1	196	130	12	44	41	41
DS	674.00	703	604	99	1 : 1	95	129	4	41	40	46
EN	591.00	574	560	14	1 : 1	72	147	4	40	35	51
GR	719.00	666	472	194	1.1 : 1	247	179	29	43	45	48
IVE	626.50	467	360	107	1.3 : 1	181	146	8	37	32	36
MH	416.60	426	334	92	1 : 1	143	95	17	25	23	19
NC	627.50	601	575	26	1 : 1	165	129	10	40	39	30
SH	814.00	481	418	63	1.7 : 1	222	120	7	43	8	40
SS	610.52	397	367	30	1.5 : 1	154	202	1	32	36	40
BLMS	841.14	833	708	125	1 : 1	207	241	9	73	6	36
IMS	1,001.08	1127	1021	106	0.9 : 1	61	196	5	51	40	1
MMS	1,230.99	1055	914	141	1.2 : 1	202	260	23	57	39	25
PCMS	1,029.52	941	697	244	1.1 : 1	149	245	6	43	49	25
PLMS	946.48	1170	1061	109	0.8 : 1	109	196	0	47	8	41
IHS	2,125.83	1703	1189	514	1.2 : 1	429	454	9	92	98	11
LHS	1,305.36	1624	1395	229	0.8 : 1	36	344	3	72	36	38
SHS	1,985.22	1830	1535	295	1.1 : 1	265	396	5	82	80	15
GK	177.15	97	82	15	1.8 : 1	8	135	0	6	7	2

Instructional desktops, laptops in classrooms labs and library: Any desktop or laptop that is used by students 50% or more of the time.

Tablets: Mostly iPads

Non-classroom computers: Office computers, custodial, kitchen, dedicated teacher computers, and computers stored waiting for surplus. Skyline has extra computers because every teacher has a desktop in their classroom plus a desktop in a separate office (plus their teacher laptop).

In addition to the inventory listed above there is a wide variety of assistive and adaptive technology devices for dedicated use by students with an IEP or 504. [This includes iPads, technology to assist visually challenged students, amplification, special keyboards and mice.](#)

Our ELL students also utilize technology to make learning accessible. [2019-2020 ELL Data](#)

Internet Service is provided to the Issaquah School District by the K-20 network. I-Net2 high speed fiber is leased from King County.

Personal electronic devices may be used by students as outlined in the [Electronic Resources policy.](#)

Covid-19 Impact

During the closure of school due to the Covid-19 pandemic and the shift to remote learning, 3,545 laptops were checked out to students between March 19, 2020 and June 2, 2020.

Families also checked out 321 Internet hotspots. Due to the limited supply from vendors, families were permitted to check out one per household.

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

Interpretation:

All funding for technology in the Issaquah School District comes from the Issaquah community. Every four years the district administrative leadership in collaboration with the Educational Technology Department and with input from schools develops a technology expenditure proposal. The proposal is presented as a springboard to the Community Bond and Levy Committee for their review, input, and revision. After completion of the community process, the plan is presented to the School Board for their final review and revision. With Board approval a proposal is presented to the community for a vote.

Evidence of Compliance:

[Technology Plan 2019](#)

The most recent Technology Levy was created as outlined above and voted on in February 2018. The community voted to accept the Technology Levy. [Tech Levy 2019-2022 Board Approved.](#)

3. Provide access to advanced, technologically rigorous courses for students.

Interpretation:

I interpret this to mean that the district offers technology courses providing advanced technology experiences and equipment for students in which they focus specifically on content that challenges them to think, create, and innovate in ways otherwise unavailable to them.

Evidence of Compliance:

The following classes are technologically rigorous as defined by the software and hardware students learn to use while in the class:

High School			
Adv Journalistic Writing (ENG355)	SHS	I-Vision TV/Video Production 1 (INT251)	IHS
Advance Computer Science Topics/Projects (COM335)	IHS, LHS	TV/Video Production 2 (INT350)	LHS, SHS
Advance Ele Engineering (7ELE05)	SHS	I-Vision T/Video Production 2 (INT351)	IHS
AP Computer Science (COM600)	IHS, LHS	TV/Video Production 3 (INT450)	LHS
Engineering Robotics (INT442)	IHS	TV Production 3 (INT451)	SHS
Graphic Design 1 (INT240)	LHS, IHS, SHS	Journalism (ENG350)	IHS, LHS
Graphic Design 2 (INT241)	IHS, SHS	Journalism 2 (ENG351)	IHS
Graphic Design 3 (TEC101)	IHS	Journalistic Writing (ENG354)	LHS, SHS
IB Computer Science HL (COM651)	SHS	Photography 1 & 2 (ART125, ART225)	IHS
IB Computer Science SL (COM650)	SHS	Project in Robotics (7TEC04)	IHS
Interactive Media 1 (INT140)	IHS	Robotics Lab (7TEC01) 7th period	LHS, SHS
Intro Computer Science (INT245)	IHS, LHS, SHS	Web Site Design (COM330)	IHS, LHS, SHS
Intro to Engineering Design (INT435)	IHS, LHS	Yearbook (INT160)	IHS, LHS, SHS
Intro Video Production (INT150)	LHS	Yearbook 2 & 3 (INT161, INT162)	IHS, SHS
Television Production (INT250)	LHS, SHS		
Gibson Ek Classroom Learning Experiences Hackathon, Podcasting, Your First 3D Print, Student Media, Building a Minecraft Server, Tinkering with TinkerCAD, Cybersecurity & Hacking, Photography, YouTube 1 & 2, Intro to Computer Science, and Game & App Design			
Middle School			
Digital Photography (KDP060, KDP078)	BLMS, IMS, MMS, PCMS	Makerspace (KSP078)	BLMS
TV & Video Production (KVP078, KTP678, KVI678, KIL078, KVP060, KVD078)	BLMS, IMS, PCMS	Principles of Flight	PCMS
Automation and Robotics (KRA078)	IMS, MMS	Yearlong Computer Science Discoveries: Web, Game, & App Design (KIN101, KIN102, KIN103, KIN104, KCS678)	PCMS, PLMS, MMS
Design and Modeling (KDM078)	IMS, MMS	Yearbook	BLMS, IMS, MMS, PCMS, PLMS
Inventors Lab (KIN078)	PCMS		

Elementary School

Science Tech Magnet serving grades 4 and 5

BW, CL, CA

Draws from all elementary schools

The elementary social studies adoption team created a variety of lessons integrating technology including Actively Learn, Google Earth, and Google Expeditions. The first year of the new adoption is 18/19 school year.

4. Establish expectations of use of technology by staff and students.

Interpretation:

I interpret this to mean that

- All middle school students will complete the required TechSmart class to assure they understand and can use technology as a learning tool in multiple ways throughout their classes and learning activities. TechSmart curriculum is updated yearly.
- Staff will integrate technology appropriately throughout their curriculum and student learning activities to provide an environment where students use technology as they would use any other tool to learn, create, produce, publish, and collaborate.
- The adoption process for Teaching and Learning Services includes representation from the Educational Technology department to provide guidance and input on technologies to support curriculum and student learning.
- All students in grades 3-11 will take Smarter Balanced Assessments on a computer.

Evidence of Compliance:

- Written in the IEA-ISD contract is the goal of providing a powerful student centered 21st century learning environment where students are actively engaged in using technology in individual and collaborative learning activities.
- Technology Levies generously approved by our community for the Issaquah School District have provided the technology resources for all of our schools to have high level access to equipment and to the Internet.
- Technology Levies also have provided training for teachers so those who have participated have the background to create classrooms that have the instruction and daily student learning experiences students need to reach E-2, part 2.
- During the 2016/17 school year a committee of 15 elementary school teachers led by two of our Instructional Technology Specialists developed a technology sequence of skills for K-5 students and identified five core tools for teachers to integrate into the curriculum that will help students learn and practice the technology skills. The core tools along with the ISTE standards serve as a focus for Ed Tech professional development.
- The elementary social studies adoption team included a variety of lessons which integrate various technologies such as Google Expeditions, Google Earth, Actively Learn, and Office365.

TechSmart Enrollment by School

School	Sn of 8th Grade 20TechSmart Enrollment by School 2019-20
Issaquah MS	323
Maywood MS	388
Pine Lake MS	193
Beaver Lake MS	246
Pacific Cascade MS	236
Total	1386

Students enrolled in TechSmart during first and second trimester (775) completed the National Speak Up Survey. Below are the responses to a few of the questions that demonstrate how students are using technology in school.

The SpeakUp Survey was not administered in 2019-20 due to Covid-19.

5. Maintain a computing environment that is safe, secure and reliable for students and staff.

Interpretation:

I interpret this to mean that the Issaquah School District Information Technology Department uses every tool available to provide a safe, secure, and reliable network and learning environment for students and staff.

Evidence of Compliance:

- Internet Safety Training provided yearly to all students K-12.
- All students must sign the Student Responsible Use Agreement.
- Central CIPA filtering device also blocks access to known malware sites; updates real-time.
- Centrally managed antivirus/antispysware on all district windows machines; updates daily.
- Centrally managed windows security updates – 2 times per month and as needed.
- Internet e-mail scanned for viruses and malware; updates hourly.
- Server storage access secured by district network account permissions.
- Nightly backups of server-based files to disc or tape; tapes rotated into fire-proof safe storage.
- Disc backup located in different physical location (IVE) from server storage (Admin).
- BYOD wireless Internet-access network firewalled from ISD network, and from peer-to-peer communication.

- Redundant firewalls protect ISD against Internet attacks.
- Redundant power source to help ensure the network keep running.

Despite robust precautions, the district experienced a ransomware attack in December 2019 during winter break which resulted in approximately 3 days of network downtime. There was little to no disruption during regular business hours. This attack mainly affected district servers which were quickly rebuilt allowing authentication operations to resume when school reopened in January. All affected server data was successfully restored from backup with no loss, and a cyber team review concluded no data breach occurred.

Additional actions were taken to harden district network resources even further

- All accounts with administrative access were reviewed and adjusted or eliminated (ongoing)
- All I.T. Department staff have been retrained in different, more secure ways to work
- Stricter mandatory staff network password policy deployed
- Newer, more secure antivirus client deployed
- Workstation security standards tightened
- Endpoint Security Specialist new position established providing needed daily focus on workstation security.
- Recent I.T. Audit by Washington State Auditor April 2020 found no deficiencies in our data backup frequency (daily) or methods of backup (disk and tape based.)
- Email has been migrated from on-premises to Office 365 eliminating local storage threats.
- Barracuda Cloud Email Security Gateway with Advanced Threat Protection has been engaged on top of native Office 365 spam filtering for better protection.
- Account protection software sourced and in process of deployment.

Violations of the student 6-12 Responsible Use Agreement resulting in student discipline are shown in the table in this link: [2019-2020](#)

6. Prohibit the use of technology resources for commercial, political, illegal or indecent purposes or that disrupts the learning environment of students.

Interpretation:

I interpret this to mean that all staff and students are provided with the appropriate Responsible Use Agreement which they read and sign. The Responsible Use Agreement describes appropriate and inappropriate use of the district network and district technology resources.

Evidence of Compliance:

All of the prohibitions listed in item six were included in the staff and student responsible use agreements, which are included in the [Regulations Manual](#) (2000-Instruction) on the district website.

Board Approval: