

Issaquah School District
Executive Limitations Monitoring Report
May 9, 2018
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 computers, laptops, tablets, non-classroom computers, electronic response systems within their school.

Other equipment on replacement cycles currently are 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 and other additional district-standard items in their school specifically to improve student learning.

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

[Tech Levy 2015-18 Planned to Actual as of FY 2016-17 \(link\)](#)

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, 2017, plus additional equipment available to staff and students.

School	FTE as of 4/1/17	Instructional desktops & laptops- classrooms, labs, library	Ratio: Students to Instruc. Computers	Tablets	Non-classroom computers
AP	681.5	396	1.7 : 1	155	106
BW	649.08	492	1.3 : 1	97	131
CA	549.75	458	1.2 : 1	84	98
CH	587.93	280	2.1 : 1	51	114
CL	759.25	472	1.6 : 1	171	90
CR	599.04	313	1.9 : 1	145	75
CS	729.54	445	1.6 : 1	193	123
DS	571.09	386	1.5 : 1	102	87
EN	675.22	381	1.8 : 1	59	78
GR	770.84	471	1.6 : 1	223	56
IVE	631.69	430	1.5 : 1	159	99
MH	427.54	333	1.3 : 1	114	21
NC	629	408	1.5 : 1	158	101
SH	635	309	2.1 : 1	140	107
SS	578.1	419	1.4 : 1	13	68
BLMS	838.62	618	1.4 : 1	160	156
IMS	955.6	734	1.3 : 1	26	173
MMS	1139.02	700	1.6 : 1	220	209
PCMS	982.67	643	1.5 : 1	151	129
PLMS	935.46	735	1.3 : 1	101	144
IHS	2095	1308	1.6 : 1	486	365
LHS	1167.7	1161	1 : 1	32	240
SHS	1989.4	1320	1.5 : 1	245	423
GK	106	151	0.7 : 1	1	9

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.

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](#).

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:

The most recent Technology Levy was created as outlined above and voted on in February 2014. The community voted to accept the Technology Levy as presented below.

	2014-2015	2015-2016	2016-2017	2017-2018	TOTALS
Staff					
Central Technology Staff	\$1,050,000	\$1,102,500	\$1,157,625	\$1,215,506	\$4,525,631
Technology Specialists	\$850,000	\$892,500	\$937,125	\$983,981	\$3,663,606
Instructional Tech Specialists	\$208,125	\$302,500	\$327,500	\$352,000	\$1,190,125
Total	\$2,108,125	\$2,297,500	\$2,422,250	\$2,551,488	\$9,379,363
Network					
Server Upgrades/Replacements/Data Storage	\$250,000	\$250,000	\$250,000	\$250,000	\$1,000,000
Telecommunications software & hardware	\$75,000	\$75,000	\$75,000	\$75,000	\$300,000
E-mail, Backup SW upgrades, Antivirus, OS software, Internet Filter	\$150,000	\$150,000	\$150,000	\$150,000	\$600,000
Firewall, routers, packetshapers	\$50,000	\$50,000	\$50,000	\$50,000	\$200,000
ISD Website, Connect, Moodle, PDPlace	\$65,000	\$65,000	\$65,000	\$65,000	\$260,000
Voice over IP transitions	\$100,000	\$100,000	\$100,000	\$100,000	\$400,000

Video Security Maintenance & Upgrades	\$75,000	\$75,000	\$75,000	\$75,000	\$300,000
Upgrade school MDFs & IDF's cabling	\$62,500	\$62,500	\$62,500	\$62,500	\$250,000
Network Software, Security detection/protection	\$50,000	\$50,000	\$50,000	\$50,000	\$200,000
E-rate services	\$6,000	\$6,500	\$7,000	\$7,500	\$27,000
Wireless higher density expansion, maintenance, upgrades	\$375,000	\$375,000	\$375,000	\$375,000	\$1,500,000
Homeroom Assessment System	\$250,000	\$85,000	\$85,000	\$85,000	\$505,000
Student/Fiscal/HR Software License	\$325,000	\$331,500	\$338,130	\$344,893	\$1,339,523
IOS/MDM for phones/tablets/personal wireless devices	\$25,000	\$25,000	\$25,000	\$25,000	\$100,000
Backbone Switch Upgrades	\$125,000	\$125,000	\$125,000	\$125,000	\$500,000
Secondary Video Conferencing	\$50,000	\$50,000	\$50,000	\$50,000	\$200,000
Student Online Registration/Business Process Automation	\$200,000	\$65,000	\$65,000	\$65,000	\$395,000
Total	\$2,233,500	\$1,940,500	\$1,947,630	\$1,954,893	\$8,076,523
For Schools					
Classroom/Lab Replacement Cycle (5 year) & add student use Tablet/Hand held device purchase/replacement	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$6,000,000
Classroom Mobile Devices	\$125,000	\$125,000	\$125,000	\$125,000	\$500,000
Laptops for Instructional Staff	\$250,000	\$250,000	\$250,000	\$250,000	\$1,000,000
Laptop Carts 3 per MS, HS, 1 TM	\$37,500	\$37,500	\$37,500	\$37,500	\$150,000
Library Hardware Allocation	\$165,000	\$165,000	\$165,000	\$165,000	\$660,000
Library Subscriptions	\$70,000	\$70,000	\$70,000	\$70,000	\$280,000
Clark Magnet	\$5,000	\$5,000	\$5,000	\$5,000	\$20,000
Cascade Ridge Magnet	\$5,000	\$5,000	\$5,000	\$5,000	\$20,000
Briarwood Magnet	\$5,000	\$5,000	\$5,000	\$5,000	\$20,000
Software Licensing Microsoft	\$100,000	\$100,000	\$100,000	\$100,000	\$400,000
Non-classroom school staff computers	\$105,000	\$105,000	\$105,000	\$105,000	\$420,000
Career and Tech Ed allocation	\$200,000	\$200,000	\$200,000	\$200,000	\$800,000
TechSmart	\$25,000	\$25,000	\$250,000	\$25,000	\$325,000
Building Tech Team Allocation	\$175,000	\$175,000	\$175,000	\$175,000	\$700,000
ITP Hardware	\$500,000	\$500,000	\$500,000	\$500,000	\$2,000,000
Projector Replacement - mounted/interactive (4 year)	\$160,000	\$160,000	\$160,000	\$160,000	\$640,000
Doc Cam Replacement (5 year) and GradeCam	\$150,000	\$150,000	\$150,000	\$150,000	\$600,000
Special Education Adaptive Technology	\$50,000	\$50,000	\$50,000	\$50,000	\$200,000
ESRs (Electronic Student Response System)	\$200,000	\$200,000	\$200,000	\$200,000	\$800,000
GPS hardware/software for school buses	\$75,000	\$75,000	\$75,000	\$75,000	\$300,000
Emergency and Communication system	\$50,000	\$50,000	\$50,000	\$50,000	\$200,000
Total	\$3,952,500	\$3,952,500	\$4,177,500	\$3,952,500	\$16,035,000
Professional Development					
Issaquah Technology Project	\$20,000	\$20,000	\$20,000	\$20,000	\$80,000

Tech Stretch, ACTIVstudio, Connect	\$50,000	\$50,000	\$50,000	\$50,000	\$200,000
Training - Tech Staff	\$40,000	\$40,000	\$40,000	\$40,000	\$160,000
On-line PD for staff - per diem option	\$35,000	\$35,000	\$35,000	\$35,000	\$140,000
Stipends - Gradebook, Webmaster, Connexpert	\$150,000	\$150,000	\$150,000	\$150,000	\$600,000
Staff Professional Development and Maintenance of teacher websites	\$1,300,000	\$1,350,000	\$1,400,000	\$1,450,000	\$5,500,000
Teacher Tech Training per diem	\$400,000	\$400,000	\$400,000	\$400,000	\$1,600,000
Total	\$1,995,000	\$2,045,000	\$2,095,000	\$2,145,000	\$8,280,000
Grand Total	\$10,289,125	\$10,235,500	\$10,642,380	\$10,603,880	\$41,770,885
Aggregate Summary					
Maintain current service	\$9,241,625	\$9,316,500	\$9,716,750	\$9,671,488	\$37,946,363
Critical Enhancements	\$560,000	\$431,500	\$438,130	\$444,893	\$1,874,523
Enhancements	\$487,500	\$487,500	\$487,500	\$487,500	\$1,950,000
Estimated Tax Impacts (Average)	2014-2015	2015-2016	2016-2017	2017-2018	
Maintain current service	\$0	\$0	\$0	\$0	
Critical Enhancements	\$0	\$0	\$0	\$0	
Enhancements	\$0	\$0	\$0	\$0	
Grand Total	\$1	\$1	\$1	\$1	
Category % Per Year (Average)	2014-2015	2015-2016	2016-2017	2017-2018	
Maintain current service	\$1	\$1	\$1	\$1	
Critical Enhancements	\$0	\$0	\$0	\$0	
Enhancements	\$0	\$0	\$0	\$0	
Grand Total	\$1	\$1	\$1	\$1	
Planned Calendar Year Levy Amounts	2014-2015	2015-2016	2016-2017	2017-2018	Total
Maintain current service	\$8,434,037	\$8,874,591	\$9,805,879	\$10,844,520	\$37,959,027
Critical Enhancements	\$511,064	\$411,033	\$442,149	\$498,853	\$1,863,098
Enhancements	\$444,899	\$464,376	\$491,972	\$546,628	\$1,947,875
Grand Total	\$9,390,000	\$9,750,000	\$10,740,000	\$11,890,000	\$41,770,000
	\$9,390,000	\$9,750,000	\$10,740,000	\$11,890,000	\$41,770,000

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
Advance Computer Science Topics/Projects (COM335)	IHS
Advance Ele Engineering (7ELE05)	SHS
AP Computer Science (COM600)	IHS, LHS
Engineering Robotics (INT442)	IHS LHS, IHS,
Graphic Design 1 (INT240)	SHS
Graphic Design 2 (INT241)	IHS, SHS
Graphic Design 3 (TEC101)	IHS
IB Computer Science HL (COM651)	SHS
IB Computer Science SL (COM650)	SHS
Interactive Media 1 (INT140)	IHS IHS, LHS,
Intro Computer Science (INT245)	SHS
Intro to Engineering Design (INT435)	IHS, LHS
Intro Video Production (INT150)	LHS
Television Production (INT250)	LHS, SHS
I-Vision TV/Video Production 1 (INT251)	IHS
TV/Video Production 2 (INT350)	LHS, SHS
I-Vision T/Video Production 2 (INT351)	IHS
TV/Video Production 3 (INT450)	LHS

Middle School

Digital Photography (KDP060, KDP078)	BLMS, IMS, MMS, and PCMS
TV & Video Production (KVP078, KTP678, KVI678, KIL078, KVP060, KVD078)	BLMS, IMS, PCMS, and PLMS
Automation and Robotics (KRA078)	IMS and MMS
Design and Modeling (KDM078)	IMS and MMS

Elementary School

Science Tech Magnet serving grades 4 and 5

TV Production 3 (INT451)	SHS
Journalism (ENG350)	IHS, LHS
Journalism 2 (ENG351)	IHS
Journalistic Writing (ENG354)	LHS, SHS
Photography 1 & 2 (ART125, ART 225)	IHS
Project in Robotics (7TEC04)	IHS
Robotics Lab (7TEC01) 7th period	LHS, SHS
Web Site Design (COM330)	IHS, LHS, SHS
Yearbook (INT160)	IHS, LHS, SHS
Yearbook 2 & 3 (INT161, INT162)	IHS, SHS

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 – also called Tier 3 classrooms.
- 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.

TechSmart Enrollment by School

School	# of students who took Tech Smart 2016-17*	% of students taking Tech Smart
Issaquah MS	333	100.0%
Maywood MS	363	99.2%
Pine Lake MS	300	96.5%
Beaver Lake MS	281	100.0%
Pacific Cascade MS	319	95.2%

Students enrolled in TechSmart during second trimester (527) 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.

6 How often do you use online or Internet resources to help you with schoolwork or studying?

Response	# of Responses	% Responses	State %	National %
Rarely or never	27	5%	8%	11%
A few times a year	24	5%	5%	6%
Once a month	12	2%	2%	3%
A few times a month	60	12%	12%	12%
Once a week	47	9%	9%	7%
A few times a week	164	32%	30%	27%
Daily or almost daily	182	35%	34%	35%

13 What types of digital content, tools, and resources do you use in your classes to support learning or school work?

Response	# of Responses	% Responses	State %	National %
Augmented or virtual reality environments	31	6%	8%	9%
Animations and simulations	106	21%	21%	18%
Digital content subscriptions (like Discovery Education)	133	27%	26%	26%
Digital, video or online games (like Kahoot, Minecraft)	242	48%	44%	51%
Google Apps for Education (like Google Docs, Google Slides etc.)	199	40%	44%	65%
Microsoft Office 365 (like Word, Excel, Apps for Windows, etc.)	410	82%	73%	35%
Online curriculum	148	30%	28%	18%
Online databases (like census data, education statistics)	79	16%	14%	15%
Online tests or assessments	253	50%	49%	52%
Online textbooks	358	71%	62%	39%
Primary source documents (like from the Library of Congress or NewseumED.org)	74	15%	16%	15%
Real-time data (like population, weather, NASA, Google Earth, GIS etc.)	130	26%	25%	23%
Social media tools	43	9%	9%	14%
Software/apps to help students develop skills (like reading, writing, math, foreign language)	86	17%	18%	24%
Speech recognition software or apps	21	4%	4%	7%
Tutorials	153	31%	30%	25%
Videos that my teachers create for us to watch	161	32%	30%	32%
Videos that I find online myself to help me with learning (like Khan Academy, YouTube, NASA)	167	33%	33%	33%
Virtual labs	61	12%	12%	16%
Web based conferencing and online meeting tools	24	5%	5%	7%
Other	26	5%	6%	6%

19 Check the box if you agree with these statements. As a result of using technology, I am...

Response	# of Responses	% Responses	State %	National %
Applying what I have learned to practical problems	280	58%	57%	50%
Collaborating with other students more	258	53%	53%	48%
Communicating with my teacher more often	195	40%	41%	39%
Getting better grades and test scores	282	58%	58%	58%
Developing creativity skills	304	63%	61%	56%
Developing critical thinking and problem solving skills	253	52%	50%	47%
Understanding what I am learning better	298	61%	60%	53%
In control over my learning	269	55%	55%	48%
Learning at my own pace	310	64%	63%	59%
Learning in a way that fits my learning style	262	54%	54%	51%
More likely to complete homework assignments	251	52%	51%	49%
More interested in what I am learning in class	240	49%	49%	47%
Participating more in class discussions	184	38%	37%	37%
Spending more time mastering a skill or learning something	219	45%	45%	43%
Taking ownership for my learning	251	52%	51%	43%
Using time at home for extended learning	216	44%	44%	36%

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/antispyware on all district windows machines; updates daily.
- Centrally managed windows security updates – 2 times per month and as needed.
- Inbound 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.
- *The ISD network had a 99.98% up time between June 2016 and March 2017. Downtime is calculated for district-wide data outages only.*

Violations of the student 6-12 Responsible Use Agreement resulting in student discipline are shown in the table below.

	Cellular Phones		Electronic Devices		Inappropriate Computer Use		Misuse Internet		Misuse Network		Telecommunication Devices	
	# of Students	# of Infractions	# of Students	# of Infractions	# of Students	# of Infractions	# of Students	# of Infractions	# of Students	# of Infractions	# of Students	# of Infractions
Issaquah MS	0	0	1	1	0	0	0	0	0	0	0	0
Maywood MS	83	103	2	2	5	5	0	0	0	0	0	0
Pine Lake MS	4	4	0	0	0	0	0	0	0	0	0	0
Beaver Lake MS	0	0	0	0	2	2	0	0	0	0	0	0
Pacific Cascade MS	0	0	2	2	1	1	0	0	0	0	0	0
Issaquah HS	0	0	0	0	0	0	1	1	0	0	0	0
Liberty HS	4	4	0	0	1	1	1	1	1	1	0	0
Skyline HS	6	6	0	0	0	0	0	0	0	0	1	1
Gibson Ek HS	0	0	0	0	0	0	0	0	0	0	0	0

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.

Capacity Building

Board Review: April 25, 2018

Board Approval: May 9, 2018 (consent agenda)