# Issaquah School District Executive Limitations Monitoring Report April 24, 2019 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 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, online subscriptions 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.

<u>Tech Levy 2015-18 Board Summary</u> (FY 2017-19)

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, 2018, plus additional equipment available to staff and students.

School	FTE as of 4/1/18	Instructional desktops & laptops-classrooms, labs, library	Ratio: Students to Instruc. Computers	Instructional laptops	Instructional desktops	Tablets	Non-classroom computers	Electronic Student Response Systems	Activ-Slates	Doc Cams	Projectors	Interactive tech - ACTIVboards & Proj.
AP	660.16	460	1.4:1	251	209	173	116	21	0	47	45	30
BW	668.60	546	1.2:1	370	176	120	135	18	3	55	40	5
CA	519.10	444	1.2:1	268	176	92	101	16	1	40	28	32
СН	622.51	346	1.8:1	277	69	60	152	18	1	34	23	33
CL	727.60	474	1.5 : 1	372	102	165	133	18	2	72	2	45
CR	600.75	433	1.4:1	279	154	194	83	9	3	38	7	33
CS	761.10	505	1.5 : 1	370	135	176	130	16	2	42	39	38
DS	649.50	391	1.7 : 1	284	107	84	88	10	0	33	30	34
EN	663.20	411	1.6:1	372	39	74	96	15	2	38	29	36
GR	776.00	537	1.4:1	303	234	230	140	34	4	44	40	47
IVE	617.43	471	1.3:1	256	215	165	142	18	2	47	35	31
MH	434.10	402	1.1:1	241	161	106	50	22	1	29	16	22
NC	623.00	499	1.2 : 1	431	68	189	128	19	12	39	31	33
SH	701.00	343	2:1	280	63	178	149	11	0	38	1	35
SS	569.00	337	1.7 : 1	302	35	96	159	12	4	32	25	32
BLMS	839.63	617	1.4 : 1	440	177	215	185	12	0	43	25	37
IMS	1,007.47	770	1.3 : 1	636	134	61	169	6	2	42	1	42
MMS	1,138.85	772	1.5 : 1	416	356	200	159	27	10	56	22	32
PCMS	975.52	689	1.4 : 1	314	375	144	134	15	3	87	37	30
PLMS	943.09	727	1.3:1	535	192	118	178	25	3	50	24	36
IHS	2,114.10	1,347	1.6 : 1	695	652	490	372	30	45	88	93	1
LHS	1,258.75	1,252	1:1	911	341	33	348	4	2	66	67	2
SHS	1,965.85	1,372	1.4 : 1	930	442	269	347	8	6	86	77	5
GK	140.00	159	0.9 : 1	125	34	3	44		-	6	5	3

**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 <u>ELL students also utilize technology</u> to make learning accessible.

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 <u>the Electronic Resources</u> <u>policy</u>.

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 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 uparadas					
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,	<b>#</b> CF 000	<b>#</b> CF 000	<b>CC</b> 000	<b>CC</b> 000	<b>#260,000</b>
PDPlace	\$65,000	\$65,000	\$65,000	\$65,000	\$260,000
Voice over IP transitions Video Security Maintenance &	\$100,000	\$100,000	\$100,000	\$100,000	\$400,000
Upgrades	\$75,000	\$75,000	\$75,000	\$75,000	\$300,000
Upgrade school MDFs & IDFs 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 IOS/MDM for phones/tablets/personal	\$325,000	\$331,500	\$338,130	\$344,893	\$1,339,523
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	φ2,233,300	φ1, <del>94</del> 0,500	φ1,947,030	φ1,954,695	φ0,070,323
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 ESRs (Electronic Student Response	\$50,000	\$50,000	\$50,000	\$50,000	\$200,000
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
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Grand Total	\$10,289,125	\$10,235,500	\$10,642,380	\$10,603,880	\$41,770,885
Aggregate Summary		<b>^</b> /	<b>^</b>	<b>^-</b> /	
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 Tay Invasits (Assessed)	2011 2015	0045 0040	0040 0047	0047.0040	
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 \$1	\$0	\$0 \$1	\$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	
- Traira Fotal	ΨI	Ψ	Ψ1	Ψ	
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

# 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	IHS, LHS	TV/Video Production 2 (INT350)	LHS, SHS
Topics/Projects (COM335)	1113, 1113	1 V) VIGCO I TOUGETION 2 (IIV1330)	1113, 3113
Advance Ele Engineering (7ELE05)	SHS	I-Vison 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	IHS, LHS	Yearbook (INT160)	IHS, LHS, SHS
(INT435)	1113, 1113	icalbook (iivi 100)	1113, 1113, 3113
Intro Video Production (INT150)	LHS	Yearbook 2 & 3 (INT161, INT162)	IHS, SHS
Television Production (INT250)	LHS, SHS		
Middle School			
Digital Photography (KDP060,	BLMS, IMS,	Principles of Flight	PCMS
KDP078)	MMS, PCMS	Timespies of Flight	I CIVIS
TV & Video Production (KVP078.	BLMS, IMS,	Yearlong Computer Science Discoveries:	
KTP678, KVI678, KIL078, KVP060,	PCMS	Web, Game, & App Design (KIN101,	PCMS
KVD078)	I CIVIS	KIN102, KIN103, and KIN104)	
			BLMS, IMS,
Automation and Robotics (KRA078)	IMS, MMS	Yearbook	MMS, PCMS,
			PLMS
Design and Modeling (KDM078)	IMS, MMS	Woodshop	PLMS
Design and Modeling (KDM078)	IMS, MMS	Woodshop	PLMS

#### **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 21<sup>st</sup> 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 Office 365.

# TechSmart Enrollment by School

School	# of students who took TechSmart 2017-18	% of students taking TechSmart
Issaquah MS	319	95.2%
Maywood MS	401	98.3%
Pine Lake MS	280	95.6%
Beaver Lake MS	271	96.1%
Pacific Cascade MS	298	89.8%

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.

6 What prevents you from using technology at your sch	6 What prevents you from using technology at your school? (Check all that apply)										
Response	# of	%									
	Responses	Responses	State %	Nat'l %							
Internet access is not schoolwide	79	12%	8%	10%							
Internet is too slow or inconsistent	267	40%	36%	39%							
Lack of computers for students to use at school	74	11%	10%	11%							
My school blocks websites I need for schoolwork	47	7%	9%	25%							
Not allowed to text with classmates	227	34%	39%	36%							
Not allowed to use my mobile devices at school	292	44%	47%	48%							
Not allowed to use social media	214	32%	39%	40%							
Teachers don't know how to use technology for learning	29	4%	6%	7%							
Teachers limit our technology use	232	35%	33%	35%							
Too many rules against using technology	202	30%	31%	37%							
I don't use technology at school	78	12%	7%	4%							
Other	80	12%	13%	11%							

7 Which of these are true for you most of the time when you are at school? (Check all that apply)											
Response	# of	%									
	Responses	Responses	State %	Nat'l %							
I use my own mobile device (smartphone, tablet, laptop) to help with schoolwork	220	32%	25%	24%							
I use a laptop in class that my school gives me to use	391	58%	29%	35%							
I use a tablet in class that my school gives me to use	130	19%	7%	16%							
I use a Chromebook in class that my school gives me to use	13	2%	61%	52%							
I use computers in the computer lab, library, or media center to help with schoolwork	385	57%	38%	28%							
I do not regularly use technology when I am at school	154	23%	11%	9%							

10. Which of these types of digital content do you use at least learning? (Check all that apply)	t monthly in you	r classroom to	support	
Response	# of Responses	% Responses	State %	Nat'l %
Augmented or virtual reality environments	37	5%	6%	8%
Animations and simulations	167	25%	29%	16%
Digital content subscriptions (like Discovery Education)	113	17%	14%	23%
Digital, video, or online games (like Kahoot, Minecraft)	379	56%	54%	56%
Google Apps for Education (like Google Docs, Google Slides etc.)	264	39%	60%	62%
Microsoft Office 365 (like Word, Excel, Apps for Windows, etc.)	512	76%	29%	27%
Online curriculum	158	23%	33%	17%
Online databases (like census data, education statistics)	156	23%	15%	13%
Online tests or assessments	262	39%	52%	54%
Online textbooks	397	59%	49%	35%
Primary source documents (like from the Library of Congress or NewseumED.org)	82	12%	14%	12%
Real-time data (like population, weather, NASA, Google Earth, GIS etc.)	126	19%	18%	19%
Social media tools	80	12%	11%	13%
Software/apps to help students develop skills (like reading, writing, math, foreign language)	121	18%	18%	22%
Speech recognition software or apps	36	5%	5%	6%
Tutorials	183	27%	23%	23%
Videos that my teachers create for us to watch	238	35%	28%	30%
Videos that I find online myself to help me with learning (like Kahn Academy, YouTube, NASA)	218	32%	34%	30%
Virtual labs	40	6%	11%	12%
Web-based conferencing and online meeting tools	22	3%	4%	6%
Other	30	4%	5%	6%

# 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 realtime.
- Centrally managed antivirus/antispyware 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.
- The ISD network had a 99.99% up time between June 2017 and March 2018. 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.

	Cell	Inappropriate Cellular Electronic Computer Misuse						Mis	use	Telecommu nication			
	Pho	nes	Devi	Devices		Use		Internet		Network		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	15	17	2	2	0	0	0	0	0	0	0	0	
Pine Lake MS	1	1	0	0	0	0	0	0	0	0	0	0	

Beaver Lake												
MS	0	0	0	0	0	0	0	0	0	0	0	0
Pacific Cascade												
MS	0	0	2	2	0	0	0	0	0	0	0	0
Issaquah HS	0	0	0	0	0	0	0	0	0	0	0	0
Liberty HS	5	5	2	2	1	2	3	3	1	1	1	1
Skyline HS	6	8	0	0	0	0	0	0	1	1	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 <u>Regulations Manual</u> (2000-Instruction) on the district website.

**Board Approval:**