SCHOOL BOARD ACTION REPORT

DATE: April 29, 2019
FROM: Ms. Denise Juneau, Superintendent
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For Introduction: May 29, 2019
For Action: June 12, 2019

1. TITLE

BTA IV: Approval of Student computer refresh to support teaching and learning and equitable access for each student districtwide

2. PURPOSE

The purpose of this Board action is to approve the purchase of student devices to support teaching and learning for every student and to eliminate equity gaps by ensuring every classroom is allotted the necessary computer device needed based on education specifications (Ed Specs).

3. RECOMMENDED MOTION

I move that the School Board authorize the Superintendent to execute purchase orders through RFP No. 06792 with Dell/Thornburg for a total Not-To-Exceed (NTE) amount of $12,000,000.00, plus Washington State Sales Tax over fiscal years 2019-20, and 2020-21 with any minor additions, deletions, and modifications deemed necessary by the Superintendent and to take any necessary actions to implement the purchase orders.

4. BACKGROUND INFORMATION

Background In order to achieve educational equity for our students, Board Policy No. 0030 states 8 promises the district shall will work to achieve. **Paramount to this BAR is the first promise:**

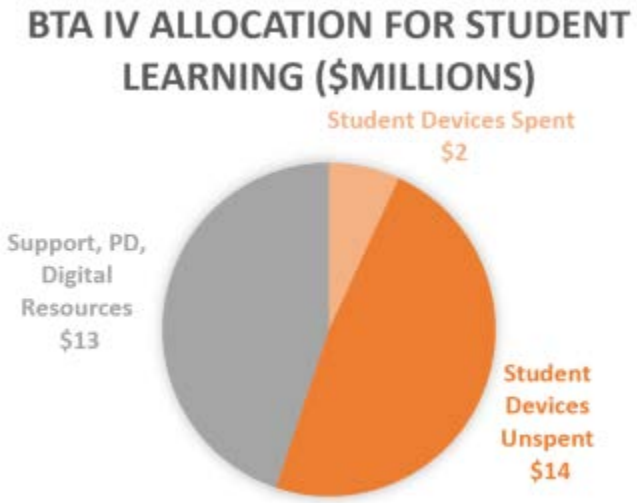
A. ***Equitable Access—The district shall provide every student with equitable access to a high-quality curriculum, support, facilities and other educational resources, even when this means differentiating resource allocation;***

Additionally, Board Policy No. 2022 states *The Board also believes that students need to be proficient users of information, media, and technology to succeed in a digital world. Therefore, the district will use electronic resources as a powerful and compelling means for students to learn core subjects and applied skills in relevant and rigorous ways. It is the district's goal to provide students with rich and ample opportunities to use technology for important purposes in schools just as individuals in workplaces and other real-life settings.*

The Buildings, Technology and Academics/Athletics IV Capital Levy (BTA IV) called for $29,300,000 for student learning to "*upgrade and expand classroom/student technology*

equipment and services, mobile and stationary computer labs, and increase on-site technical support services for schools and student technology," however, lack of a specific plan for implementation and stakeholder consensus delayed implementation of classroom/student technology while teaching models were tested, consensus built, and a plan formulated and articulated.

Planning for the Building Excellence V Capital Levy (BEX V) led to the development of a strategy for BEX V but also a strategy that delivers on the goals stated above for the unspent BTA IV funds in keeping with the promise to the voters who passed the levy in February 2016. Of $16 Million allocated specifically for student devices in the 2016 BTA IV levy (a portion of the $29.3 Million), only about $2 Million has been spent. The last student technology replacement was completed in the winter of 2016 with small investments being completed for pilots in middle and high school and equipping a few dozen teachers piloting digital learning. Only new schools that have opened in the last three years have received a significant upgrade to meet teaching and learning needs in a contemporary classroom.



After BTA IV passed, the Board asked for research on the efficacy of technology in the classroom, a technology plan, and further engagement. While postponing needed district computer upgrades (almost 15,000 devices are currently over 5 years old), staff has completed research, pilot programs, engagement, equity analysis, inventory, and planning. The 2019-2023 Seattle Public Schools Technology Plan, backed by research, State Educational Technology standards, and district and community support, outlines goals for technology for the district priority of **High-Quality Instruction and Learning Experiences**, part of the 2019-2024 Seattle Schools Strategic Plan.

Teachers and students need technology to support teaching and learning given today's digital world. Classroom technology use will follow with the foundational principles developed over two years of engagement and research and part of the Technology Plan. Key to implementation are:

- Aligning technology to Teaching and Learning goals and adopted curriculum.
- Providing a baseline of technology for all schools - An allocation for each classroom as part of the education specification.

- Eliminating the use of libraries and computer labs for testing (have enough classroom devices).
- Following a technology plan, standards, and research.

To this end the specific plan includes maintaining a baseline of devices on a four-year replacement cycle centrally managed and funded. The standard established is a cart of devices per classroom with 12-16 devices in K-8. High schools will provide a computer to all ninth-grade students beginning in 2019-2020 linking to curriculum needs each year. The 2016 High School Education Specification calls for 1-1 ratio in high schools.

Grade Level	Number of Devices per classroom	Device Type
K-2	12	Laptops or iPads
3-5	15	Laptops
6-8	16	Laptops
9-12	16-30	Laptops

An accurate inventory determines an equitable baseline of technology at schools which currently requires replacing nearly 15,000 desktops.

Moving from a cart-based model to a student based / curriculum model for supplying laptops for high school students is to support curricular areas and adoptions by Curriculum, Assessment and Instruction (CAI). The four-year phase - in plan provides that 9th graders taking English 1 would get laptops to keep for four years. Laptops would support specific content areas and adoption schedules with English 1, Physical Science, and Algebra being the focus next year. Staff would repeat the process each year for four years adding subjects - year two adds English 2, Biology, and Geometry. The goal is to have laptops for students for any future adoption so digital materials are an option, using a computer to gain college and career skills, and equitable access is provided for each and every student.

Higher need high schools including Rainier Beach, Franklin, World School, and Chief Sealth would get an accelerated roll out. Providing a laptop to every high school student closes an equity gap ensuring each and every student is given the right tools to be successful in high school. Moreover, wireless hotspots would be made available for check-out for students who would otherwise not have a way of accessing the internet while away from school. Providing the opportunity for internet accessibility while at home ensures equitable access to all.
The decision to equip incoming freshman with their own device is not about establishing a ratio, rather ensuring students have the tools they need to be successful in high school while simultaneously adhering to the current high school education specifications and looking at research from principal and state-wide surveys.

- **Alternatives** Although money to "*upgrade and expand classroom/student technology equipment*" in BTA IV was approved by the School Board, advertised and approved by voters, the current Board could choose not to approve this motion and not allocate funds. This will negatively affect our results in the Promises Made, Promise Kept reporting.

  We could continue to pause allocation of funds longer than the current three years for even more engagement and research. This is not recommended as there is increasing urgency to solve for opportunity gaps and delaying equitable resources to students may further broaden the gaps.

- **Research** Much research was completed. Key sources include the Washington State Education Technology Standards, The Principles of Digital Learning, research by the SPS Research & Evaluation Department, research on aligning to Continuous Improvement Plans, statewide and district surveys, and research effectiveness of Cleveland Science, Technology, Engineering and Math (STEM) High School which has a 1-1 laptop program.
  - **a.** In May 2018, the State of Washington adopted Technology Standards based on the 2016 Technology Standards for Students released by the International Society for Technology in Education (ISTE). The Office of the Superintendent of Public Instruction (OSPI) states, "These standards emphasize the ways that technology can be used to amplify and even transform learning and teaching and resonate with our state's aspiration to empower connected learners in a connected world. In addition, they complement statewide efforts to enhance instruction in digital citizenship (ISTE Standard 2) and media literacy (ISTE Standards 1 and 3), as defined below: Digital citizens recognize and value the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they engage in safe, legal and ethical behaviors. Media literacy is the ability to access, analyze, evaluate, create and act using a variety of forms of communication.

    Based upon the 2016 ISTE student standards:
    - **Empowered Learner** - Students leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals, informed by the learning sciences.

- **Digital Citizen** - Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical.
- **Knowledge Constructor** - Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others.
- **Innovative Designer** - Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions.
- **Computational Thinker** - Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.
- **Creative Communicator** - Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals.
- **Global Collaborator** - Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally."

b. John D. Ross, Ph.D. produced a literature review, titled "Principles for Effective Technology-Enabled Learning: A Review of Literature" in August 2018. The topics in the research and principles are based on discussions with district leadership in Seattle Public Schools and a review of relevant national juried documents and artifacts that support the district's mission. The principals are aligned to two frameworks central to teaching and learning in the district: Charlotte Danielson's A Framework for Teaching and a pyramid of pedagogical knowledge based on the Skillful Teacher from Research for Better Teaching, Inc. Both frameworks address components related to curriculum planning, motivation, instructional strategies, and managing learning. While the two frameworks are important to district leaders in Seattle, the question posed for this review was "how do digital technologies and content resources support best practices in these areas?" This literature provides information and data to explore that question.

Based on a set of principles derived first out of the analysis of the crossover between the two frameworks and major themes in the literature, the following principles are listed below and explored in Principles of Effective Digital Learning:

- Principle 1: Digital resources promote student achievement for all students, especially historically underserved students, when students use them to produce information rather than passively consume information, but technology use alone is ineffective unless mediated by a skillful teacher.
- Principle 2: Digital resources help teachers develop authentic learning opportunities that align with the depth of rigor of college-and-career ready standards and are relevant and meaningful to students.
- Principle 3: Digital resources have and continue to change what "literacy" and "being literate" mean and look like.

- Principle 4: Digital resources can help but alone are insufficient for helping students authentically engage in learning.
- Principle 5: Digital resources allow students and teachers to connect and collaborate with other students, teachers and other influential adults, and with the content.
- Principle 6: Digital resources provide opportunities for students to demonstrate mastery of learning goals in a variety of ways.
- Principle 7: Digital resources allow teachers and students to monitor progress towards learning goals.

c. The Research & Evaluation department worked during the 2017-18 school year with the Digital Learning team and Program Tomorrow on a research project. Program Tomorrow is a national education non-profit organization that works to ensure that today's students are well prepared to be tomorrow's innovators, leaders and engaged citizens of the world. The team administered a survey to Seattle Public School teachers who had received digital learning resources. These groups included:

a. Teachers in new, technology-rich schools who received no intense training,
b. Users who had training focused on digital materials, and
c. Digital Learning Institute participants who received intensive training, support, and technology.

Findings include:

- The SPS teacher study cohort place a higher premium on the value of student technology use within instruction as a factor in driving student success than teachers nationwide. For example, 66% of the teachers in the sample who are teaching in a blended learning environment say that the effective use of digital tools is extremely important for student success; only 44% of teachers nationwide hold the same opinion.
- SPS teachers in the study cohort are using digital resources in their classroom to facilitate new learning experiences for students while at the same time leveraging district provided online tools to keep students and parents informed of class activities and requirements. Teachers in the SPS cohort appear to be using these tools more than teachers nationwide which indicates a greater sophistication level in usage and a readiness to use advanced technologies and instructional practices.

d. The professional development and associated technology plans from high schools that added technology demonstrated that technology can be part of schools fulfilling their Continuous School Improvement Plans (CSIP's) while aligning with student competencies outlined in the newly-adopted Washington State K-12 Educational Technology Standards.

e. The Association for Computer Professionals in Education (ACPE), a Pacific Northwest 501(c)(6) nonprofit association that strives to increase collaboration and professional development opportunities within the K-12 educational

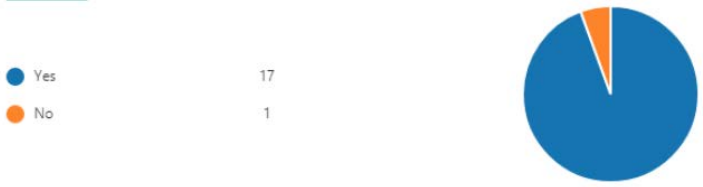
technology community, surveyed all member districts. Out of 42 responding, all but 6 including Seattle had a 1-1 ratio in high schools (and most started earlier) with a take home model including: Auburn, Bellingham, Edmonds, Bethel, Kent, North Thurston, Puyallup, Renton, Richland, and Shoreline, with Vancouver, Highline, and Spokane all starting in 4th grade. The below graphic illustrates neighboring districts who have shifted to a 1-1 take home model with the majority of secondary students having access to a take home device:

District (take home)	K	1	2	3	4	5	6	7	8	9	10	11	12	District (take home)	K	1	2	3	4	5	6	7	8	9	10	11	12
Anacortes	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Northshore	N	N	N	N	N	N	N	N	N	N	N	N	N
Auburn	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	North Kitsap	N	N	N	N	N	N	N	N	N	N	N	N	N
Battle Ground	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	North Thurston	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y
Bellingham	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Oak Harbor	N	N	N	N	N	N	N	N	N	N	N	N	N
Bethel	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Othello	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y
Camas	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Pasco	N	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y
Edmonds	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Puyallup	N	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y
Everett	N	N	N	N	N	N	N	N	N	Y	Y	Y	Y	Renton	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y
Highline	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Richland	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y
Kennewick	N	N	N	N	N	N	Y	Y	Y	Y	Y	N	N	Riverside	N	N	N	N	N	N	N	N	N	Y	Y	Y	Y
Kent	N	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Riverview	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y
Issaquah	N	N	N	N	N	N	N	N	N	N	N	N	N	Seattle	N	N	N	N	N	N	N	N	N	N	N	N	N
Joseph SD	N	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Sherwood	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y
Lake School	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Shoreline	N	N	N	N	N	N	N	N	N	Y	Y	Y	Y
Lake Stevens	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Spokane	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
Lake Washington	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Sumner	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y
Liberty	N	N	N	N	N	N	N	N	N	Y	Y	Y	Y	Vancouver	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
Marysville	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Washougal	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y
Medical Lake	N	N	N	N	N	N	N	N	N	Y	Y	Y	Y	Wilbur	N	N	N	N	N	N	N	N	N	Y	Y	Y	Y
Mercer Island	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Warden	N	N	N	N	N	N	N	N	N	N	N	N	N
Monroe	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	White River	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y

f. All Seattle Public School principals supported the plan for all students to have a computer in high schools in a survey to the building leaders, with one leader wanting computers to remain in school. The results of the High School Principal Survey overwhelmingly demonstrate the desire for high school students to have their own device:

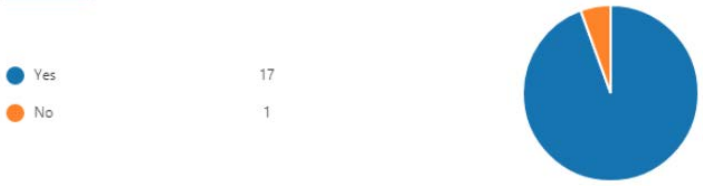
1. Would you support a plan where 9th graders receive a laptop and keep for 4 years with all grade levels having laptops in 4 years phasing out computer carts?

More Details



2. Would subject area teachers commit to using laptop for instruction/learning? Eg. Using for writing, research, collaboration, media creation, presentations, simulations, and online applications (Phasing in starting with English 1, Physical Science, and Algebra 1)

More Details



*One alternative school wants a 1-1 cart model.

g. Although causation cannot not be verified, below is growth data for Graduation Rate and Smarter Balanced Assessments (SBA) in English Language Arts and Math for Cleveland STEM High School since implementing its program which includes every student being assigned a laptop:

	2012–13	**2013–14**	**2014–15**	**2015–16**	**2016–17**	**2017–18**
Graduation Rate	76.61%	70.93%	79.37%	89.00%	91.89%	92.20%
SBA - ELA	n/a	n/a	34.93%	53.28%	65.70%	80.42%
SBA - Math	n/a	n/a	5.42%	38.91%	*	50.19%

*Data unavailable.

5. FISCAL IMPACT/REVENUE SOURCE

Fiscal impact to this action will be Not-To-Exceed $12,000,000. The revenue source for this motion is BTA IV Student and Class Computer Modernization.

Expenditure: ☐ One-time ☐ Annual ☒ **Multi-Year** ☐ N/A

Revenue: ☐ One-time ☐ Annual ☒ **Multi-Year** ☐ N/A

6. COMMUNITY ENGAGEMENT

With guidance from the District's Community Engagement tool, this action was determined to merit the following tier of community engagement:

☐ Not applicable

☐ Tier 1: Inform

☒ **Tier 2: Consult/Involve**

☐ Tier 3: Collaborate

In February 2013, 72% of Seattle voters supported the BTA IV Capital levy. This levy supports the district's long-range plans to upgrade and renovate aging technology and was the culmination of an eighteen-month long process analyzing the technology needs of the district. The process included countless hours of planning, coordinating efforts throughout the district, community engagement and feedback, extensive Seattle School Board guidance and input that led to a unanimous Seattle School Board vote in November 2015 that approved the BTA IV projects list. Within the projects list were monies designated for Student Learning *"Upgrade and expand classroom/student technology equipment and services, mobile and stationary computer labs, and increase on-site technical support services for schools and student technology"* (Winter 2016 Levies Information brochure).
Planning for the Building Excellence V Capital Levy (BEX V) led to the development of a strategy for BEX V but also a strategy that delivers on the goals stated above for the unspent BTA IV funds in keeping with the promise to the voters who passed the levy in February 2016.

Internal Engagement

Date	**Department**	**Purpose**
10/9/17	Schools	BEX V and Long-Term Technology Planning
10/16/17	Strategies and Partnerships	BEX V and Long-Term Technology Planning
10/19/17	Business and Finance	BEX V and Long-Term Technology Planning
10/23/17	Student Support Services	BEX V and Long-Term Technology Planning
10/24/17	Communications	BEX V and Long-Term Technology Planning
10/24/17	Curriculum, Assessment, and Instruction (CAI)	BEX V and Long-Term Technology Planning
10/24/17	Legal	BEX V and Long-Term Technology Planning
10/25/17	Operations	BEX V and Long-Term Technology Planning
11/2/17	Operations	BEX V and Long-Term Technology Planning
11/9/17	Communications	BEX V and Long-Term Technology Planning
11/13/17	Teaching and Learning	BEX V and Long-Term Technology Planning
1/18-10/18	DoTS, CAI, Schools	Principles of Effective Digital Learning development
7/18/18	Operations Cabinet Meeting	Technology Planning Update
7/23-27/18	DoTS, CAI	STEM Smithsonian Conference
March – Oct 2018	Research & Evaluation and Schools	In school research on technology, professional learning, and impact
11/7/18	Operations Cabinet Meeting	Technology Plan Overview
1/23/19	Superintendent Review	Technology Plan Overview

1/30/19	Small Cabinet Meeting	Technology Plan Overview
Feb 2019	Individual Board Director Meetings	Technology Plan Overview
3/7/19	Capital Projects	Technology Plan Overview

External Engagement

Date	**Community/Region**	**Purpose**
3/28/18	Board Work Session	Planning
4/2/18	Aki Kurose Middle School	Community Input
4/3/18	Madison Middle School	Community Input
4/23/18	T. T. Minor School/Seattle World School	Community Input
4/24/18	Jane Addams Middle School	Community Input
4/26/18	Monroe School/Salmon Bay K-8	Community Input
5/30/18	Board Work Session	Program List and Funding
6/1/18	Chinese Home Language	Community Input
6/18/18	Information Technology Advisory Committee	Project Prioritization
6/19/18	Somali Home Language	Community Input
8/20/18	Information Technology Advisory Committee	Project Prioritization
8/22/18	Board Work Session	Project List and Funding
9/12/18	Ingraham High School	Community Input
9/13/18	West Seattle High School	Community Input
9/17/18	Information Technology Advisory Committee	Project Prioritization
9/20/18	Mercer Middle School	Community Input
9/24/18	Roosevelt High School	Community Input
9/25/18	Meany Middle School	Community Input
9/26/18	Board Work Session	Finalize Project List and Funding
10/10/18	Board Work Session	Capital Planning
10/15/18	Information Technology Advisory Committee	Planning
10/18/18	Board Work Session	Community Input
11/19/18	Information Technology Advisory Committee	Planning
12/6/18	Washington Middle School	Community Input
12/11/18	Rainier Beach High School	Community Input
12/12/18	Chief Sealth High School	Community Input
12/17/18	Information Technology Advisory Committee	Planning
1/8/19	John Rogers Elementary School	Community Input
1/10/19	Montlake Elementary School	Community Input
1/14/19	Information Technology Advisory Committee	Planning
1/22/19	Rainier Beach High School	Community Input

7. EQUITY ANALYSIS

It is the moral and ethical responsibility and a top priority for Seattle Public Schools to provide equitable access and opportunity for every student, and to eliminate racial inequity in its educational and administrative system.

Research indicates that racial disparities exist in virtually every key indicator of child, family, and community well-being. Individual, institutional and structural impacts of race and racism are pervasive and significantly affect key life indicators of success. The Racial Equity Analysis Tool lays out a clear process and a set of questions to guide the development, implementation and evaluation of significant policies, initiatives, professional development, programs, instructional practices and budget issues to address the impacts on racial equity. To do this requires ending individual racism, institutional racism, and structural racism.

The concept of racial equity goes beyond formal racial equality — where all students are treated the same — to foster a barrier-free environment where all students, regardless of their race have the opportunity to achieve. This means differentiating resource allocations, within budgetary limitations, to serve students with the support and opportunities they need to succeed academically.

Board Policy No. 0030 states:

With these commitments in mind, Seattle Public Schools will:

- *Raise the achievement of all students while narrowing the gaps between the lowest and highest performing students;*
- *Eliminate the racial predictability and disproportionality in all aspects of education and its administration;*
- *Ensure all students regardless of race or class graduate from Seattle Public Schools ready to succeed in a racially and culturally diverse local, national, and global community.*

In order to achieve educational equity for our students, the policy states 8 promises the district shall will work to achieve. **Paramount to this BAR is the first promise:**

A. Equitable Access—The district shall provide every student with equitable access to a high-quality curriculum, support, facilities and other educational resources, even when this means differentiating resource allocation;

The Departments of Technology Services (DoTS) and Teaching and Learning participate in racially equitable outcomes for students by providing structures and supports that focus resources, technologies, and support where they are needed most to eliminate gaps in student achievement and gaps in opportunity.

Leadership identified and engaged stakeholders making sure that racial/ethnic groups potentially impacted by this plan, especially communities of color, including students who are English Language Learners and students who have special needs were addressed. Throughout the levy planning period, leadership attended community input sessions at schools, with language groups, and in the community to hear from community members about their needs. All input from these

community meetings has been considered in the context of the technology plan and this investment in our students.

Staff worked to collect specific information about the school, program, and community conditions to help determine if anything would create racial inequities that would increase the opportunity gap. With the assistance of Digital Learning Teachers and Technical Support Specialists, DoTS gathered actionable data related to the number of devices currently in each school. This data was used to determine how potential decisions made would impact the current and future student populations. Moreover, leveraging members of the ITAC, the community, and schools provided varying perspectives leading to inclusive and equitable decisions. Additionally, Community Based Organizations (CBO's) have been included in engagement to ensure the groups and communities they serve are being heard and represented.

Staff looked for potential benefits or unintended consequences. Asking for feedback on a regular basis through various channels targeted at all stakeholders will allow for engagement and transparency as staff seek to identify issues. As staff makes a report, it will note any unintended consequences and ask stakeholders to share if they have seen any. The district does not want any blind spots to affect the work.

With this plan, educational and racial equity would be represented through each student having access to technology regardless of school location or access levels at home and resources would be allocated at different levels, where necessary, to make sure goals are achieved. It will take the efforts of all adults to leverage the investment in technology help to support those furthest from educational justice and historically underserved. Waiting to provide *every student with equitable access to a high-quality curriculum, support, facilities and other educational resources* would show a lack of urgency to address equity and institutional racism.

8. STUDENT BENEFIT

Providing all students with equitable access to technology equips them with a tool for learning in today's digital world. It gives each student access to digital resources and skill opportunities needed to achieve in K-12, college and career.

When thinking about the advantage's students gain when given access to technology, three benefits stand out:

- Leverage current and future digitally-based curriculum, resources, and tools.
- Meet standards K-12 for skills and competencies set forth by OSPI.
- Hone technology-based fluency resulting in graduating students that are college, career, and community ready.

Every student deserves this.

9. WHY BOARD ACTION IS NECESSARY

☒ Amount of contract initial value or contract amendment exceeds $250,000 (Policy No. 6220)

☐ Amount of grant exceeds $250,000 in a single fiscal year (Policy No. 6114)

☐ Adopting, amending, or repealing a Board policy

☐ Formally accepting the completion of a public works project and closing out the contract

☐ Legal requirement for the School Board to take action on this matter

☐ Board Policy No. _____, [TITLE], provides the Board shall approve this item

☐ Other:

10. POLICY IMPLICATION

Per Board Policy No. 6220, Procurement, any contract over $250,000.00 must be brought before the Board for approval. Per Board Policy No. 0030, Ensuring Educational and Racial Equity, *In order to achieve educational equity for out students, the district shall:*

A. Equitable Access – The district shall provide every student with equitable access to a high quality curriculum, support, facilities and other educational resources, even when this means differentiating resource allocation.

Per Board Policy No. 2022, Electronic Resources/Use of the Internet, *The Board also believes that students need to be proficient users of information, media, and technology to succeed in a digital world. Therefore, the district will use electronic resources as a powerful and compelling means for students to learn core subjects and applied skills in relevant and rigorous ways.*

11. BOARD COMMITTEE RECOMMENDATION

This motion was discussed at the Curriculum and Instruction Committee meeting on May 21, 2019. The Committee reviewed the motion and moved it forward to the full board for approval.

12. TIMELINE FOR IMPLEMENTATION

Upon Board approval of this motion, purchase orders will be executed to begin the procurement process for summer purchase for high schools. K-8 roll outs will begin in the Fall.

13. ATTACHMENTS

- Student Device Purchase Plan by School (For Approval)
- Mobile Devices by School (For Reference)

BTA IV: Approval of Student computer refresh to support teaching and learning and equitable access for each student districtwide

Seattle Public Schools is committed to making its online information accessible and usable to all people, regardless of ability or technology. Meeting web accessibility guidelines and standards is an ongoing process that we are consistently working to improve.

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- Student Device Purchase Plan by School
- Mobile Devices by School

Student Device Purchase Plan by School

High School - 9th Grade 1:1 with Accelerated Rollout at 4 Equity Schools

In the recommended option, 9th grade at all high schools will receive 1:1 in 2019. 4 equity schools will get an accelerated rollout, providing 1:1 for all grades in 2019. These equity schools include: Seattle World School (WSS Tier 1), Rainier Beach High School (WSS Tier 2), Franklin High School (WSS Tier 2), and Chief Sealth International High School (WSS Tier 3). Remaining high schools will fill out their 1:1 over the following 3 years, with each incoming grade receiving 1:1 devices. Serviceable mobile devices from the 4 equity schools will be repurposed to middle and K-8 schools. For the high school 1:1 program, 3 percent swap devices have been accounted for, allowing for limited down time for students.

School Name	WSS Tier	Enrollment	2019: Devices Needed	2019
Ballard High School	4	2010	557	$453,067
Chief Sealth International High School	3	1058	1,090	$885,499
Cleveland STEM High School	4	892	236	$192,663
Franklin High School	2	1246	1,283	$1,042,048
Garfield High School	4	1786	419	$341,112
Ingraham International High School	4	1392	380	$309,478
Lincoln High School		1120	17	$15,568
Middle College High School	4	48	4	$4,618
Nathan Hale High School	4	1192	324	$264,030
Nova High School	4	263	49	$40,929
Rainier Beach High School	2	755	778	$632,385
Roosevelt High School	4	1941	517	$420,623
Seattle World School	1	264	272	$221,867
South Lake High School	1	58	0	
The Center School	4	244	73	$60,413
West Seattle High School	4	1034	267	$217,817
Grand Total			6,266	$5,102,115

ES, MS, K8 - Standard Cart Model, Dependent on Accelerated HS Rollout

In the recommended option, elementary, middle and K-8 schools will be brought up to the standard of a cart per classroom. Each MS or K-8 cart will contain 16 devices; elementary schools will have 15 devices per cart.

School Name	WSS Tier	Enrollment	Devices Needed	Carts Needed	Total Costs
Adams Elementary	3	540	124	10	$51,902
Aki Kurose Middle School	1	664	190	15	$121,509
Alki Elementary	4	368	81	7	$34,467
Arbor Heights Elementary	4	589	320	24	$131,767
B.F. Day Elementary	4	351	252	18	$102,683
Bailey Gatzert Elementary	2	308	101	9	$43,304
Beacon Hill International School	4	414	100	8	$41,779
BRIDGES Transition	1	118	50	5	$33,243
Broadview-Thomson K-8 School	3	580	358	24	$223,818
Bryant Elementary	4	558	258	18	$104,612
Cascadia Elementary	4	509	0	0	$0
Catharine Blaine K-8 School	4	759	0	0	$0
Cedar Park Elementary	4	152	80	6	$32,942
Concord International School	2	369	131	10	$54,153
Daniel Bagley Elementary	4	405	162	12	$66,527
Dearborn Park International School	3	340	161	12	$66,205
Decatur Elementary	4	245	0	0	$0
Denny International Middle School	1	875	434	32	$274,829
Dunlap Elementary	2	323	184	13	$74,803
Eckstein Middle School	4	1036	0	0	$0
Emerson Elementary	1	377	222	16	$90,631
Fairmount Park Elementary	4	532	222	16	$90,631
Frantz Coe Elementary	4	537	206	15	$84,283
Gatewood Elementary	3	396	161	12	$66,205
Genesee Hill Elementary	4	676	183	14	$75,685
Graham Hill Elementary	3	321	236	17	$96,336
Green Lake Elementary	4	445	184	15	$77,210
Greenwood Elementary	4	339	183	12	$73,278

Hamilton International Middle School	3	1027	366	25	$229,378
Hawthorne Elementary	3	415	131	10	$54,153
Hazel Wolf K-8 School	4	735	160	12	$101,564
Highland Park Elementary	2	335	138	11	$57,607
InterAgency	1	395	32	2	$19,831
Jane Addams Middle School	4	936	285	20	$179,255
John Hay Elementary	4	477	266	18	$107,184
John Muir Elementary	2	343	231	16	$93,525
John Rogers Elementary	4	337	188	14	$77,293
John Stanford International School	4	468	104	8	$43,065
Kimball Elementary	4	434	109	9	$45,876
Lafayette Elementary	4	427	292	21	$119,154
Laurelhurst Elementary	4	337	231	17	$94,728
Lawton Elementary	4	474	110	8	$44,994
Leschi Elementary	2	377	146	11	$60,179
Licton Springs K-8 School	3	173	0	0	$0
Louisa Boren STEM K-8 School	4	558	57	5	$37,055
Lowell Elementary	2	304	170	14	$71,506
Loyal Heights Elementary	4	450	0	0	$0
M. L. King Jr. Elementary	2	325	212	15	$86,212
Madison Middle School	4	951	0	0	$0
Madrona Elementary	2	254	331	23	$134,100
Maple Elementary	4	549	224	16	$91,274
McClure Middle School	4	541	222	17	$141,341
McDonald International Elementary	4	479	193	13	$77,697
McGilvra Elementary	4	249	163	11	$65,644
Meany Middle School	4	499	0	0	$0
Mercer International Middle School	2	1152	95	9	$62,560
Montlake Elementary	4	252	51	4	$21,211
North Beach Elementary	4	384	79	7	$33,824
Northgate Elementary	3	257	111	9	$46,519
Olympic Hills Elementary	3	493	0	0	$0
Olympic View Elementary	4	444	241	17	$97,943
Orca K-8 School	3	393	306	21	$191,893
Pathfinder K-8 School	4	487	201	14	$126,295
Queen Anne Elementary	4	288	203	14	$82,115
Rainier View Elementary	3	240	124	10	$51,902
Robert Eagle Staff Middle School	4	835	0	0	$0
Roxhill Elementary	2	315	0	0	$0
Sacajawea Elementary	3	254	23	3	$11,005
Salmon Bay K-8 School	4	655	0	0	$0
Sand Point Elementary	3	209	126	9	$51,342
Sanislo Elementary	2	220	172	13	$70,945
South Shore PK-8 School	1	579	499	33	$311,425
Stevens Elementary	4	254	132	10	$54,474
Thornton Creek Elementary	4	601	350	26	$143,819
Thurgood Marshall Elementary	4	505	66	7	$29,644
TOPS K-8 School	4	486	276	19	$173,151
Van Asselt Elementary	3	437	274	20	$112,164
View Ridge Elementary	4	515	278	20	$113,450
Viewlands Elementary	3	377	194	14	$79,222
Washington Middle School	2	664	280	21	$177,736
Wedgwood Elementary	4	473	265	19	$108,066
West Seattle Elementary	2	464	150	12	$62,669
West Woodland Elementary	4	537	324	23	$131,849
Whitman Middle School	3	574	207	14	$129,562
Whittier Elementary	4	447	176	12	$71,028
Wing Luke Elementary	3	329	56	5	$24,022
Grand Total			14,203	1,039	$6,715,257

2018

Technology: Mobile Device Distribution

Last updated:
12/14/2018

Site Code : Students per Device

Students Per Device

- Exceeds Standards, <=1
- Meets Standard, <=2
- Nears Standard, <=3
- Does Not Meet Standard, <=4
- Well Below Standard, >4

Equity Tier

- 1
- 2
- 3
- 4

School Type

- ES Elementary
- MS Middle
- HS High
- K8 K-8
- NT Non traditional

BVW:2.7
ING:2.9
OLH:1
CPK:1
NRG:2.3
HWF:1.9
ADD:2
HAL:2.1
ROG:3.4
VUL:4.5
MAL:1.7
LSP:0.9
NBC:2.5
WTM:1.3
RES:1.1
CAS:1
OLV:3.3
SAC:1.4
WDG:5.8
LOY:1
GWD:4.4
BAG:2.3
TCK:3.7
DEC:1
WTR:3.4
ECK:5.7
BAL:3.4
QUE:3.6
VUR:3.2
MNR:2.6
GLK:2.3
ROS:3.4
ADM:2.1
WWD:4.3
BRY:4.2
SPT:1.6
MCD:3.6
LRL:5.2
LAW:3
HAM:2.9
LAT:3.1
DAY:4.8
BLN:1.6
SWR:3.3
COE:2.7
MNT:1.6
MCL:2.5
MCG:3.2
HAY:4.6
STV:2.2
LOW:2.1
CTR:3.7
MNY:0.7
SWS:1.3
MDR:6.2
MAN:2.1
GAR:4.8
GAT:1.8
LES:2.1
WAS:1.4
THM:1.7
BCN:2
LAF:3.9
ALK:1.7
WST:3.8
FRK:3.3
MAD:3.1
KIM:1.8
MUR:3.4
GEN:2.2
COO:2.3
MER:1.3
HAW:2.3
MPL:2.9
--:6.8
FPK:4.5
WTW:3.2
GLE:1
DPK:2.9
BOR:1.5
AKI:1.6
GRA:3
MLK:3.5
HPT:2.1
GTW:2.7
SAN:2.7
WGL:1.5
DEN:2.5
ROX:0.9
SEL:4.1
AAA:2.8
SLK:0.5
DUN:2.5
RBC:1.3
HPK:1.9
CON:2.1
SSH:3.7
EMR:3.7
ARB:3.3
RVU:2.8

The names on this map are not intended to reflect the official name of any school building. They are instead intended to ensure better public understanding based upon familiar reference, particularly in situations where program and school building names differ. This information has been compiled by SPS staff from a variety of sources and is subject to change without notice. SPS makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. SPS shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on this map. Any sale of this map or information on this map is prohibited. MapFile: mobile_devices_2018_annotation

Technology: Mobile Device Distribution

School Name	Site Code	Equity Tier	Enrollment	Devices	Students/ device
Adams ES	ADM	3	540	255	2.1
Aki Kurose MS	AKI	1	664	412	1.6
Alki ES	ALK	4	368	216	1.7
Arbor Heights ES	ARB	4	589	179	3.3
B.F. Day ES	DAY	4	351	73	4.8
Bailey Gatzert ES	GAT	2	308	168	1.8
Ballard HS	BAL	4	2010	585	3.4
Beacon Hill Int'l School	BCN	4	414	205	2.0
Broadview-Thomson K-8	BVW	3	580	216	2.7
Bryant ES	BRY	4	558	132	4.2
Cascadia ES	CAS	4	509	497	1.0
Catharine Blaine K-8	BLN	4	759	477	1.6
Cedar Park ES	CPK	4	152	155	1.0
Chief Sealth Int'l HS	SEL	3	1058	256	4.1
Cleveland STEM HS	CLE	4	892	892	1.0
Concord Int'l School	CON	2	369	176	2.1
Daniel Bagley ES	BAG	4	405	178	2.3
Dearborn Park Int'l School	DPK	3	340	117	2.9
Decatur ES	DEC	4	245	244	1.0
Denny Int'l MS	DEN	1	875	357	2.5
Dunlap ES	DUN	2	323	128	2.5
Eckstein MS	ECK	4	1036	181	5.7
Emerson ES	EMR	1	377	101	3.7
Fairmount Park ES	FPK	4	532	117	4.5
Franklin HS	FRK	2	1246	373	3.3
Frantz Coe ES	COE	4	537	200	2.7
Garfield HS	GAR	4	1786	371	4.8
Gatewood ES	GTW	3	396	146	2.7
Genesee Hill ES	GEN	4	676	306	2.2
Graham Hill ES	GRA	3	321	106	3.0
Green Lake ES	GLK	4	445	190	2.3
Greenwood ES	GWD	4	339	77	4.4
Hamilton Int'l MS	HAM	3	1027	350	2.9
Hawthorne ES	HAW	3	415	183	2.3
Hazel Wolf K-8	PNH	4	735	396	1.9
Highland Park ES	HPK	2	335	173	1.9
Ingraham Int'l HS	ING	4	1392	487	2.9
InterAgency	COL	1	395	58	6.8
Jane Addams MS	ADD	4	936	462	2.0
John Hay ES	HAY	4	477	103	4.6
John Muir ES	MUR	2	343	101	3.4
John Rogers ES	ROG	4	337	100	3.4
John Stanford Int'l	LAT	4	468	150	3.1
Kimball ES	KIM	4	434	245	1.8
Lafayette ES	LAF	4	427	110	3.9
Laurelhurst ES	LRL	4	337	65	5.2
Lawton ES	LAW	4	474	157	3.0
Leschi ES	LES	2	377	176	2.1
Licton Springs K-8	LSP	3	173	192	0.9
Louisa Boren STEM K-8	BOR	4	558	377	1.5
Lowell ES	LOW	2	304	147	2.1
Loyal Heights ES	LOY	4	450	446	1.0
M. L. King Jr. ES	MLK	2	325	93	3.5
Madison MS	MAD	4	951	308	3.1
Madrona ES	MDR	2	254	41	6.2
Maple ES	MPL	4	549	189	2.9
McClure MS	MCL	4	541	213	2.5
McDonald Int'l ES	MCD	4	479	134	3.6
McGilvra ES	MCG	4	249	77	3.2
Meany MS	MNY	4	499	695	0.7
Mercer Int'l MS	MER	2	1152	873	1.3
MS College HS	MAL	4	48	28	1.7
Montlake ES	MNT	4	252	154	1.6
Nathan Hale HS	HAL	4	1192	574	2.1
North Beach ES	NBC	4	384	156	2.5
Northgate ES	NRG	3	257	113	2.3
Nova HS	MAN	4	263	127	2.1
Olympic Hills ES	OLH	3	493	477	1.0
Olympic View ES	OLV	4	444	136	3.3
Orca K-8	WTW	3	393	121	3.2
Pathfinder K-8	COO	4	487	212	2.3
Queen Anne ES	QUE	4	288	81	3.6
Rainier Beach HS	RBC	2	755	583	1.3
Rainier View ES	RVU	3	240	87	2.8
Robert Eagle Staff MS	RES	4	835	730	1.1
Roosevelt HS	ROS	4	1941	570	3.4
Roxhill ES	ROX	2	315	346	0.9
Sacajawea ES	SAC	3	254	187	1.4
Salmon Bay K-8	MNR	4	655	251	2.6
Sand Point ES	SPT	3	209	129	1.6
Sanislo ES	SAN	2	220	81	2.7
Seattle World School	SWS	1	264	208	1.3
South Lake HS	SLK	1	58	116	0.5
South Shore PK-8	SSH	1	579	157	3.7
Stevens ES	STV	4	254	115	2.2
The Center School	CTR	4	244	66	3.7
Thornton Creek ES	TCK	4	601	164	3.7
Thurgood Marshall ES	THM	4	505	301	1.7
TOPS K-8	SWR	4	486	147	3.3
Van Asselt ES	AAA	3	437	155	2.8
View Ridge ES	VUR	4	515	161	3.2
Viewlands ES	VUL	3	377	84	4.5
Washington MS	WAS	2	664	481	1.4
Wedgwood ES	WDG	4	473	82	5.8
West Seattle ES	HPT	2	464	216	2.1
West Seattle HS	WST	4	1034	273	3.8
West Woodland ES	WWD	4	537	126	4.3
Whitman MS	WTM	3	574	427	1.3
Whittier ES	WTR	4	447	132	3.4
Wing Luke ES	WGL	3	329	223	1.5

"Mobile Devices" are defined as laptops and tablets.

Mobile Devices older than five years are not included in this data.