SCHOOL BOARD ACTION REPORT

DATE: September 11, 2018
FROM: Denise Juneau, Superintendent
LEAD STAFF: Kyle Kinoshita, Chief of Curriculum, Assessment, and Instruction, kdkinoshita@seattleschools.org
Caleb Perkins, Director of College and Career Readiness, cbperkins@seattleschools.org

For Introduction: October 3, 2018
For Action: October 17, 2018

1. TITLE

BTA IV: Approval of Technology Purchases to Support Student Learning Through New Instructional Practices

2. PURPOSE

The purpose of this Board action is to approve the purchase of student laptops to support learning through new instructional practices. The computers are needed in classrooms so that teachers can implement the technology-based professional development (PD) training they are receiving as a part of high school re-visioning. PD plans have been approved by staff from the Department of Curriculum and Instruction.

The purchase will include approximately 1000 computers in 60 carts. Computers range in price from $358-$377 for laptops and $975 for 1 desktop, and carts range in price from $1068 to $1086, for a cost of approximately $490,000. Imaging services at $24.50 per laptop, plus carting services at $8 per cart, add approximately $30,000, for a total cost of approximately $520,000.

3. RECOMMENDED MOTION

I move that the School Board authorize the Superintendent to execute purchase orders through RFP No. 07792 with Dell/Thornburg for a total Not-To-Exceed amount of $550,000.00, over fiscal years 2018/19, in the form of the order requests attached to the Board Action Report, 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

a. **Background:** Seattle Public Schools' SMART Goal # 3 is focused on promoting college and career readiness, particularly at the high school level. Staff are committed to developing plans for re-visioning all Seattle Public Schools high schools to produce graduates who meet new Washington State graduation requirements and who are highly successful in college and careers. The plan calls for professional development to support academic rigor and student engagement. To that end, all high schools developed site-based professional development plans for the 2018-19 school year. To support the plans,

staff also allocated BTA IV levy funds approved to upgrade and expand classroom/student technology for approved technology that complements each school's professional development project, either in supporting teacher learning goals, or in implementing teacher goals with students. All schools were required to develop PD plans, but plans for technology were optional. The rationale behind that decision was that SPS staff wanted to offer technology to schools that were ready to use it, but not force it on schools that were not ready. Site plans and technology requests to support them were approved by Caleb Perkins, Director of College and Career Readiness. Dr. Perkins reviewed the plans with Kyle Kinoshita, Chief of Curriculum, Assessment, and Instruction, Eric Anderson, Director of Research and Evaluation, and Emily Harrison, Project Manager for Secondary Re-visioning. Staff reviewed all plans to ensure that they meaningfully addressed the district goals of improving student engagement and academic rigor. In many cases, Dr. Perkins followed up with principals to ask clarifying questions and to request additional information on how the PD plans would target rigor and engagement.

The Summer Digital Learning Cohort is a part of many high schools' plans for professional development, and a major driver of these requests for laptops. Ballard, Chief Sealth, Franklin, Ingraham, Middle College, Rainier Beach, Roosevelt, South Lake, and West Seattle all sent educators to participate in the 2018 cohort. Cohort members developed skills to use student laptops and learned how to implement instructional strategies within their classrooms.

During the two-day summer institute, teachers in the cohort participated in activities to learn how to combine small group instruction into their lessons with district technology tools (i.e. Schoology, Office 365) to ignite learning. Teachers designed lessons where some students use technology tools to facilitate independent and collaborative learning. During the institute, teachers worked in groups as learners and then based on these experiences, spent time designing plans to apply learning strategies to help improve student outcomes.

Members of the cohort will use the laptops in their classrooms to implement the digital learning strategies and skills that they learned over the summer. Many participants in the summer program will share their newly-developed expertise with other teachers in the building, thus raising the capacity of the entire school to implement the school's professional development plan.

SPS surveyed members of 2017's Summer Digital Learning Cohort to find out if their use of technology in the classroom had improved their effectiveness as teachers and/or increased student engagement. Most teachers responded very favorably, and expressed a belief that the tools they were able to implement as a result of their training made them better teachers. One teacher wrote that with technology tools in the classroom, she was able to work more in small groups and offer differentiated instruction to her students. Another wrote that when his students used software to receive instant feedback on math problems, they took charge of their learning and learned from their mistakes. One teacher referenced equity, writing that technology has closed the opportunity gap in her classroom, as students who did not have laptops or internet access at home did have access at school.

Lincoln High School developed a plan for technology to be used when the school opens in 2019. Lincoln is hiring teachers from Garfield and Center School, who participated in the Summer Digital Learning Cohort, and will work on tenets of Lincoln's plan at those schools during the 2018-19 school year and implement them at Lincoln in September 2019.

West Seattle High School is also working with Microsoft on professional development for teachers. Microsoft is providing training on using the collaborative and educational tools available through Office 365, and West Seattle is making collaboration and digital leaning part of its PD plan.

Ballard High School has created its own Instructional Innovation Cohort of 21 teachers interested in blended learning, to complement the district wide Digital Learning Cohort. Members of the cohort have already received training, and are developing lesson plans to implement in the classroom.

Skills Center will also use laptops to support its plans for professional development. Teachers at the Skills Center will work with a consultant to develop their ability to lead students through career connected project based learning, and students will need laptops in order to complete those projects. Currently, the Skills Center only has one small laptop cart, which must be shared across several locations. With more laptops, more students will be able to move freely around a worksite, shop, or lab with a computer in hand, recording data, reading and writing informational text, and accessing industry-specific technology tools. Teachers at Skills Center will deepen their pedagogy around online learning, and will need their students to have access to laptop carts so that those students can fully participate in lessons built around online learning.

And finally, Seattle World School will be training teachers to use technology to conduct research, to support students as they analyze data using software, and to design technology-based student projects. They will be implementing their training in classrooms by assigning student projects involving research and data analysis, and guiding their students through those challenging projects.

As with all goal driven initiatives, there will be assessment of the efficacy of the plan and accountability for results. The Department of Curriculum and Instruction is partnering with SPS's Research and Evaluation team to develop a plan for evaluating the effectiveness of each school's professional development, including professional development on the use of technology in the classroom. Dr. Anderson is in the process of hiring a research scientist to lead the overall work, and Dr. Jessica Beaver, a senior research scientist already with the district, will focus on the technology component. The evaluation plan is still in draft form, but Dr. Anderson is developing logic models outlining inputs, activities, outcomes, and impact, and also refining research questions. The research questions ask what we can learn from our school-based PD efforts to help shape a common districtwide approach to increasing rigor and engagement for students, and how our investments in PD improved the knowledge, skills, and capacity of our teachers.

b. **Alternatives:** Do not approve this motion. This is not recommended. If we provide professional development to teachers that will help them facilitate implementation of the schools' professional development plans, but do not give them the support they need to implement what they learn, the plan will not materialize. The focus of our SMART Goal is to prepare SPS students for college and career in the 21st century, and we cannot do that without providing students and their teachers with the tools to implement each school's specific plans.

Research: The professional development plans and the associated technology plans have a high degree of alignment with student competencies outlined in the newly-adopted Washington State K-12 Educational Technology Standards. Two overarching goals guide the student learning supported by the technology request:

- Integrate technology across core curricula, and provide realistic examples connected to other content standards whenever possible.
- Determine what students should know and be able to do in a digital world.

The specific grades 9-12 educational technology standards that teachers will help students learn through the professional development are:

3. **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.

3.a. Students plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.

3.b. Students evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.

3.c. Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.

3.d. Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.

4. **Innovative Designer** - Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions.

4.a. Students know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.

6. **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.

6.a. Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.

6.b. Students create original works or responsibly repurpose or remix digital resources into new creations.

6.c. Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.

6.d. Students publish or present content that customizes the message and medium for

their intended audiences.

There is a deep research base underpinning benefits to student learning and strong teacher capacity on the appropriate use of technology. According to Steven Higgins, ZhiMin Xiao, and Maria Katsipataki of Durham University, the use of technology in education is effective when it is underpinned by sound pedagogy and used alongside high-quality training for teachers (The Impact of Digital Technology on Learning: A Summary for the Education Endowment Foundation, 2012). Because our teachers are receiving training specifically focused on digital learning as part of their professional development plans, they will gain the skills they need to effectively change pedagogy.

Recognizing a need to understand the research around using technology in the classroom, the district commissioned a comprehensive review of the literature. John D. Ross, Ph.D. produced this literature review, titled "Principles for Effective Technology-Enabled Learning: A Review of Literature" in August 2018. The central question he sought to answer was how digital technologies and content resources support best practices in curriculum planning, motivation, and managing learning. After reviewing existing research on that question, Dr. Ross built a framework of 7 overarching principles, which are summarized below:

- 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.

All of these principles provide valuable insights for the district, and suggest future work streams, but principle 1 is particularly relevant to this BAR, and to secondary re-visioning. As a district, we recognize that we are not adequately preparing each and every student for post-secondary success, and we are driven to eliminate the opportunity gap. Principle 1 posits that digital resources can promote student achievement, especially for our historically underserved students, if those digital resources are mediated by a skillful teacher. Through our professional development funding, including our funding for the Summer Digital Learning Cohort, we are building the capacity of our teachers to use technology in the classroom, and expect to see that technology usage drive student achievement for all of our students, including our underserved students.

5. FISCAL IMPACT/REVENUE SOURCE

Fiscal impact to this action will be the one-time cost for the purchase of computers and carts for a total NTE $550,000.00.

The revenue source for this motion is BTA IV.

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 lead to a unanimous Seattle School Board vote in November 2012 that approved the BTA IV projects list.

Furthermore, many high schools that participated in the 2018 Summer Digital Learning Cohort were able to engage with Teaching and Learning to access their site-specific needs under the guidance of their CSIP and develop strategies needed to accomplish them. Technology and its value in supporting student learning and collaboration has also been discussed in the Information Technology Advisory Committee (ITAC) meetings. The most recent meeting on Monday, August 20, 2018 provided the committee with the chance to discuss student devices and specific ways technology was and could be used to improve professional development and student learning. ITAC is made up of teachers, administrators, students, and the community at large, providing for new perspectives and diverse opinion. Finally, the district's community engagement tool kit was applied to this proposed purchase of technology to support professional development with Tier 1, Inform being the most applicable level of engagement identified.

7. EQUITY ANALYSIS

Principals are using an equity lens when developing their professional learning plans in support of re-visioning. The plan for re-visioning is not only focused on producing graduates who meet new Washington State graduation requirements and who are highly successful in college and

career-technical fields, but also on eliminating gaps in the graduation rates. As noted in the problem statement for the district's SMART Goal #3, approximately 1 in 5 high school students do not graduate from Seattle Public Schools within 4 years, including disproportionate representation by students of color, low income, Special Education and English Language Learners. Local employers consistently identify shortages of qualified employees across a wide range of industries and job roles, and workforce/career development is a major interest of numerous local leaders including the Governor's office, the City of Seattle, Port of Seattle, and Seattle Chamber of Commerce. The high school system in Seattle Public Schools is not adequately preparing each and every student for postsecondary success in college, career, and the possibilities Seattle has to offer.

The graduation rate for Historically Underserved students (Black, Hispanic, Pacific Islander and Native American) was 67.3% for the 2018 school year while the White/Asian subgroups was over 80%. Through re-visioning, we are seeking to close this gap so all students graduate.

All high schools across the district were eligible for funding of $62.50 per student for technology purchases related to implementing teaching strategies learned through teacher professional development. Many schools decided to request student laptops, but others did not put in a request. If they decide to request laptops at a later date, after seeing the success that other schools are having with student laptops, the Department of Technology Services will work with them to identify funding, most likely through the BTA IV levy.

8. STUDENT BENEFIT

Our theory of change is that if we provide teachers with high quality professional development, including professional development on facilitating digital learning, and give them the technology they need to implement what they learn, then student learning, engagement, and achievement will increase. We expect to see students using technology to complete rigorous tasks connected to content standards, to do research, to work collaboratively with their teachers and other students, and to engage in project based learning and deeper learning.

As explained above, we will be evaluating this professional development work, including the technology component, to measure student benefit through the lenses of academic rigor and student engagement.

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 must be brought before the Board for approval.

11. BOARD COMMITTEE RECOMMENDATION

This motion was discussed at the Curriculum and Instruction Committee meeting on September 11th, 2018. The Committee reviewed the motion and recommended the motion move forward for consideration by the School Board.

12. TIMELINE FOR IMPLEMENTATION

Upon Board approval of this motion, purchase orders will be executed to begin the procurement process, and principals will be informed of the arrival date for their computers.

13. ATTACHMENT

- Computer requests broken down by school (for approval)

Computer Requests Broken Down by School

Computer Requests from High School Principals, Related to High School Professional Development					
Note that this includes laptops, laptop carts, and desktop computers only.					
School	**Computer Quantity**	**Computer Model**	**Laptop Cart Quantity**	**Laptop Cart Model**	**Connection to Professional Development**
Ballard HS	255	Dell Latitude 3189 Convertible Tablet Quote #9379	15	Bretford CoreX 36-Device Laptop Cart Quote #8274	Teachers trained through Summer Digital Learning Cohort will implement new digital learning pedagogies in classrooms. Instructional Innovation Cohort of 21 teachers learning Blended Learning technologies will implement blended learning in classrooms.
Chief Sealth HS	72	Dell Latitude 3189 Convertible Tablet Quote #9379	4	Bretford CoreX 24-Device Laptop Cart Quote #7429	Teachers trained through Summer Digital Learning Cohort will implement new digital learning pedagogies in classrooms.
Franklin HS	144	Dell Latitude 3189 Convertible Tablet Quote #9379	9	Bretford CoreX 24-Device Laptop Cart Quote #7429	Teachers trained through Summer Digital Learning Cohort will implement

					new digital learning pedagogies in classrooms.
Ingraham HS	128 Chromebooks; 64 Latitudes	Chromebook and Dell Latitude 3189 Convertible Table Quote #9379	10	Bretford CoreX 24-Device Laptop Cart Quote #7429	Teachers trained through Summer Digital Learning Cohort will implement new digital learning pedagogies in classrooms.
Lincoln HS	32	Dell Latitude 3189 Convertible Tablet Quote #9379	2	Bretford CoreX 24-Device Laptop Cart Quote #7429	Teachers trained through Summer Digital Learning Cohort will implement new digital learning pedagogies in classrooms. Teachers receiving training from Microsoft on adaptive technology software will use adaptive technology in classrooms.
Middle College	4 laptops; 1 desktop	Dell Cloudbook Latitude 3180 **Quote #9079; iMac Quote #2204645157	0	n/a	Teachers trained through Summer Digital Learning Cohort will implement new digital learning pedagogies in classrooms.
Rainier Beach HS	92	Dell Latitude 3189 Convertible Tablet Quote #9379	5	Bretford CoreX 24-Device Laptop Cart Quote #7429	Teachers trained through Summer Digital Learning Cohort will implement new digital learning pedagogies in classrooms.

Roosevelt HS	64	Dell Latitude 3189 Convertible Tablet Quote #9379	4	Bretford CoreX 24-Device Laptop Cart Quote #7429	Teachers trained through Summer Digital Learning Cohort will implement new digital learning pedagogies in classrooms.
Seattle World School	32	Dell Latitude 3189 Convertible Tablet Quote #9379	2	Bretford CoreX 24-Device Laptop Cart Quote #7429	Teachers receiving training on using technology to conduct research, support student analysis of data for assignments, and design technology-based student projects will implement their training in classrooms.
Skills Center	21	Dell Latitude 3189 Convertible Tablet Quote #9379	1	Bretford CoreX 24-Device Laptop Cart Quote #7429	Teachers receiving training on creating career connected project based learning experiences will assign projects requiring student access to laptops. Teachers receiving training on facilitating online learning will teach lessons requiring student access to laptops.
South Lake HS	5	Dell Latitude 3189 Convertible Tablet Quote #9379	1	Bretford CoreX 24-Device Laptop Cart Quote #7429	Teachers trained through Summer Digital Learning Cohort will implement new digital learning

					pedagogies in classrooms.
West Seattle HS	96	Dell Latitude 3189 Convertible Tablet Quote #9379	2 of each model	Bretford CoreX 36-Device Laptop Cart Quote #8274; Bretford CoreX 24-Device Laptop Cart Quote #7429	Teachers trained through Summer Digital Learning Cohort will implement new digital learning pedagogies in classrooms. Teachers receiving training from Microsoft will implement classroom instruction incorporating collaborative and educational software.