

Technology at BRS 2020/21 & 2021/22



Woodbridge Board of Education April 20, 2021

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Structure of Tonight's Presentation

I. WSD Financing of Technology

- A. WSD Technology Funding Sources
- B. A Deeper Look at Leasing

II. Technology to Support Learning at BRS

- A. Supporting Teachers
- B. Supporting Students

I. WSD Financing of Technology

A. WSD Technology Funding Sources

WSD Technology Funding Sources

Source	FY 2022 Allocation	Purpose								
Leasing	\$50,115	Purchase of desktops & laptops								
Operating Budget (outside of leasing)	\$50,085	Purchase of iPads, other hardware, software, & supplies								
Capital Budget	\$20,000	Purchase of technology infrastructure such as servers, wireless controllers, and wiring								
Recycling	\$4,812	Funds that are recouped from recycling obsolete technology are used for unanticipated needs								
Title IV Grant Funding	\$1,340	Technology to improve academic performance & digital literacy								

I. WSD Financing of Technology

B. A Deeper Look at Leasing

Current Inventory

Laptops

- 136 Used by administrators, teachers, Board of Education, and special projects (e.g., Lego Robotics)
 - Typical rotation is that a new device is assigned to a teacher and stays with that individual through its life cycle.

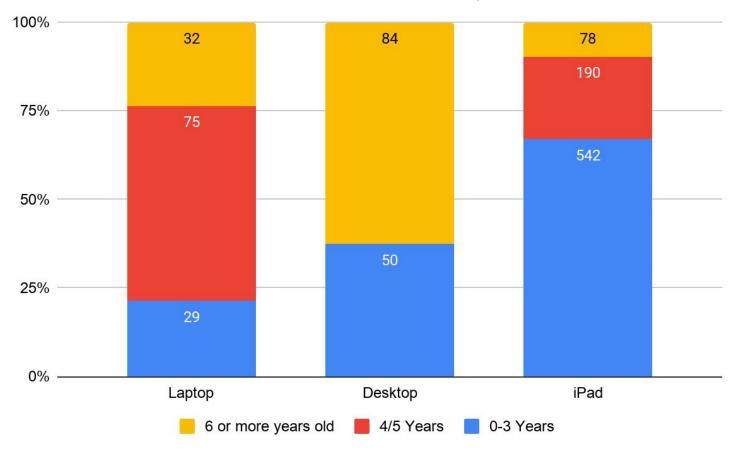
Desktops

- 134 Used in Technology Center, Library, Offices, Classrooms
 - Typical rotation is that a new device starts in either the Technology Center or an office, then rotates through the library before going to a classroom location.

iPads

- 810 Used by teachers & students (1:1 Grades 2-6, centers in K &1), including for specified special education learning needs
 - Typical rotation cycle is that a new device starts in 4th grade with a student, stays with the student through 6th grade, then goes to a student for 2nd and 3rd grades.

Current Inventory



Technology Use Principles

- Regular replenishment of technology allows for consistency in level of budget funding.
- A regular and routine replacement cycle ensures that technology hardware does not become obsolete or unable to run current software.
- iPads cannot be leased, and are purchased through inclusion in the operating budget.
- Laptops and desktops can be leased, and our proposed operating budget includes leasing of these two types of devices.

FY 2022 Budget Recommendation (as presented to the Finance Committee on April 8, 2021)

Items	Amount Financed	5-Year Annual	АРҮ	Total Investment
Laptops and Desktops (All): 100 Laptops + 103 Desktops	\$246,147	\$50,115	0.90%	\$250,577

Pros

- Consistent budgeting
- Macbooks are same age, enabling standardized software & hardware support
- Option to upgrade before the end of lease term
- Cost of money < 1% (\$4,428 total borrowing cost over 5 years or \$886/year)

Cons

All inventory can become potentially obsolete at same time (extreme case)

II. Technology to Support Learning at BRS

A. Supporting Teachers

ISTE Standards for Teachers

(International
Society for
Technology in
Education 2016;
adopted by
CSDE 2018)

- Learner: Educators continually improve their practice by learning from and with others and exploring proven and promising practices that leverage technology to improve student learning.
- Leader: Educators seek out opportunities for leadership to support student empowerment and success and to improve teaching and learning.
- **Citizen:** Educators inspire students to positively contribute to and responsibly participate in the digital world.
- Collaborator: Educators dedicate time to collaborate with both colleagues and students to improve practice, discover and share resources and ideas, and solve problems.
- Designer: Educators design authentic, learner-driven activities and environments that recognize and accommodate learner variability.
- **Facilitator:** Educators facilitate learning with technology to support student achievement of the ISTE Standards for Students.
- Analyst: Educators understand and use data to drive their instruction and support students in achieving their learning goals.

Technology Opportunities for Teachers

- Co-teaching
- Professional Development
 - PD days
 - Grade-level teams
 - One-on-one trainings
- Self-directed learning resources developed by BRS staff
- Additional opportunities provided by both the Library Media
 Center staff and the STEM specialist

<u>Technology Provided To / Available For Teachers</u>

- SMARTBoards
- Document Cameras
- Laptops
- iPads
- iPods
- VR goggles / Google Expeditions

Teacher Professional Development on March 19, 2021

Woodbridge School District Teacher Professional Development March 19, 2021

Time	Focus	Goal	Note							
8:30	Fostering Active, Deep, Learning* through Technology Integration	By engaging with an expert on technology integration, and peers from both across the school and within grade-level teams, each teacher will: (a) celebrate personal & professional growth in technology integration at Beecher over the past year; (b) develop understanding of additional methods to foster	If you plan to work from home, please bring with you any materials that would be necessary for planning an upcoming unit.							
12:00	Facilitators: Jackie Whiting (CES) & James Crawford	active, deep learning through technology integration; and (c) apply one such method (Choice Boards, Station Rotation, or Flipgrid) to an upcoming unit.								
	* ISTE (International Society for Technology in Education) Standard for Educato 5b: Educators will design authentic learning activities that align with content-arstandards and use digital tools and resources to maximize active, deep learning.									
12:00 - 1:00	Lunch & Movement Break									
1:00	Sexual Harassment Prevention Training	By engaging with learning videos and in group discussions, each teacher will gain statutory awareness of Connecticut's laws related to								
3:30	Facilitators: Jonathan Budd & Cheryl Kiesel	sexual harassment, as well as Woodbridge's relevant policies and procedures.								

"We cannot become what we need to be by remaining what we are."

~ Max DePree

Learning and Teaching Practices Survey

The survey was designed in partnership with education researchers at SRI (formerly known as the Stanford Research Institute). This 15-minute teacher survey was designed to provide insights into learning and teaching practices related to technology at our school

This survey asked questions on the following topics:

- Teacher perception of technology
- Teacher sense of preparation for using technology
- Teacher professional learning goals
- Student practices using technology
- Types of student learning products produced with technology tools

Survey responses will be shared with the District PDEC (Professional Development & Evaluation Committee) for planning for 2021-22 & beyond, and also with the Board of Education.

II. Technology to Support Learning at BRS

B. Supporting Students

ISTE Standards for Students

(International
Society for
Technology in
Education 2016;
adopted by
CSDE 2018)

- **Innovative Designer:** Students use a variety of technologies within a design process to identify and solve problems by creating new, useful, or imaginative 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.
- **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.
- **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.
- Digital Citizen: Students recognize the rights, responsibilities and opportunities of living, learning, and working in an interconnected digital world. They act and model in ways that are safe, legal, and ethical.
- **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.
- **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.

Example of ISTE
Standard
Matrix

Project	ID				C	С		KC		СТ			DC		EL						GC			
	1a	1b	1c	1d	1e	2a	2b	2c	3a	3b	4a	4b	4c	4d	5a	5b	6a	6b	6c	6d	6e	6f	7a	7b
ABC Book	x	x	х	x	x	x		x	x		x		x		x	х				- 3	х	х	х	x
Coding (Kodable and Code-a-pillar)						x	x			x	х	x	x	x	×	x					x	x	x	×
Lexia	5	5	x	x				7 8	x	8	x	х		50	×	x	x	x	x	x	х	x		Î
Drawing on the iPad	×	x	x	x	x		x	x	x		x			x	x	x					х	x	х	x
Drawing on the Computer	x	х			x		х	x	x		x				x	x		x	x		x	x		
Intro to Lab. & Rules						9								37 - 3 C	x	х						х		x
Using a tablet	x	х	x	x	х		x	x	х		x		x		x	x	x	х	x	x	х	x		x
Using a desktop computer	×	x	x	x	x		x	x	x		x		x	3. ·	x	x	x	x	x	x	x	x		x

Technology Opportunities for Students

Scheduled Classes

 Students have Technology Education as part of their regularly scheduled specials period.

Non-Scheduled Times

- Co-Teaching between technology specialists and classroom teachers
- Collaboration between technology specialists and specialists in STEM, health, library media, DARE, and others
- Support for language learners
- Open tech lab for fifth and sixth grade
- WBRS News

Kindergarten Coding







Grade 1 Coding with Robots





Grade 2
Learning
Keyboarding
Skills





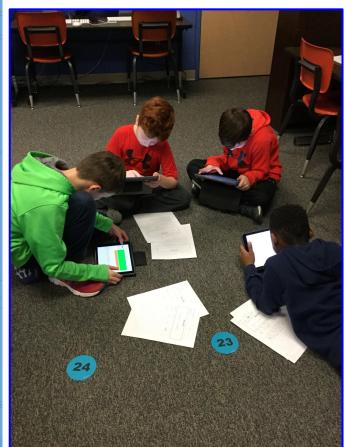
Grade 3
Combining
Literacy &
Technology

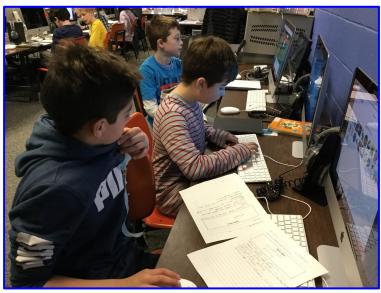






Grade 4
Digital
Citizenship
Work Groups





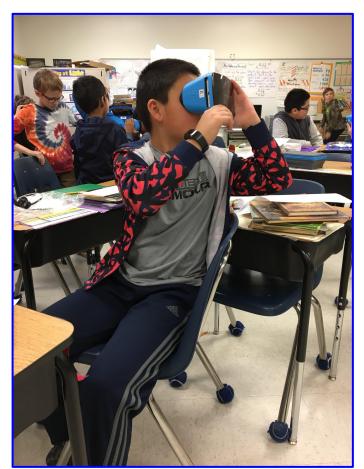
Grade 5 & 6
Coding with
Python in Open
Studio & Robot
Exploration







Grades 5 & 6
Exploring
Virtual Reality





Technology Integration in the Classroom







Looking Forward to 2021/22

- Additional assured technology integration learning for teachers based on needs assessment and best practices for professional development
- Additional assured technology integration for students, including
 Maker Space
- Strategic refocus of Library Media Center & Technology Department

Questions?

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