

## Technology Strategic Plan July 1, 2019 - June 30, 2022

**Board Biennial Priority 3.2: Define facility standards for 21st Century schools, identifying relevant data points, citing regulations that require upgrades, and establishing minimum standards for all facilities.**

**Key District Strategy 3.2.2: Ensure resources and technical infrastructure are sufficient to support modern classrooms and blended learning.**

**Strategic Technology Goal: Provide equitable access to resources to ensure that all students are given equal opportunity to successfully build their capacity for learning and demonstrate their knowledge, interests, and skills**

**Key Metrics: Quantity, Replacement Part Cost & Availability, Device Performance, Device Cost of Ownership**

Key Technology Strategy	Year 1	Year 2	Year 3	Responsible
ABSS will have a sustainable funding, refresh, maintenance, and upgrade process for supporting 1:1 access to student computers	Purchase chromebooks to replace those in schools that have reached their end of life  Quantity: 8000  4 Yr. lease: \$550,000 Annually  1 time buy: \$1,975,000		Purchase chromebooks to replace those in schools that have reached their end of life  Quantity: 9000  4 Yr. lease: \$600,000 Annually  1 time buy: \$2,160,000	Technical Support Workgroup - Jason
ABSS will have a sustainable funding, refresh, and maintenance process for supporting 1:1 classroom access to digital presentation systems for both staff and students	Purchase projectors to replace those in schools that have reached their end of life  Quantity: 400  Cost: \$400,000	Purchase projectors to replace those in schools that have reached their end of life  Quantity: 400  Cost: \$400,000	Purchase projectors to replace those in schools that have reached their end of life  Quantity: 400  Cost: \$400,000	Technical Support Workgroup - Jason
ABSS will have a sustainable funding, refresh, maintenance, and upgrade process for supporting 1:1 access to staff computers	Current lease - Year 3	Current lease - Year 4	Purchase laptops to replace those in schools that have reached their end of life - 5 yr.  Quantity: 2000  4 Yr. lease: \$410,000 Annually  1 time buy: \$1,550,000	Technical Support Workgroup - Jason

**Board Biennial Priority 3.2: Define facility standards for 21st Century schools, identifying relevant data points, citing regulations that require upgrades, and establishing minimum standards for all facilities.**

**Key District Strategy 3.2.1: Enhance security features of facilities to include visitor management systems, security vestibules, enhanced ingress control, and surveillance.**

<b>Strategic Technology Goal: Establish a trusted, secure, and safe digital environment that supports healthy, positive outcomes for our learning community</b>				
<b>Key Metrics: Quantity, Replacement Part Cost &amp; Availability, Device Performance, Device Cost of Ownership</b>				

<b>Key Technology Strategy</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Responsible</b>
ABSS will provide continual support for Ident-a-kid visitor management software	Quantity: 36 Annual: \$17,000	Quantity: 36 Annual: \$17,000	Quantity: 36 Annual: \$17,000	Technical Support & Systems Admin - Workgroups - Jason & Tommaso
ABSS will provide device management at the classroom level that provides teachers with device monitoring, web filtering, and online content access management	Annual: \$62,000	Annual: \$62,000	Annual: \$62,000	Technology Department CTO - Dennis
ABSS will provide enhanced security provisions to enable data privacy and security in digital communications	Google Enterprise Advanced Edition Annual: \$46,000	Google Enterprise Advanced Edition Annual: \$46,000	Google Enterprise Advanced Edition Annual: \$46,000	Technology Department CTO - Dennis
ABSS will perform regular audits of security practices and infrastructure capacity for both local and cloud based services and communicate the measures, testing results, and process improvement strategies confidentially to district leadership	MCNC Cybersecurity Risk Assessment and Testing Services Annual: \$10,000	MCNC Cybersecurity Risk Assessment and Testing Services Annual: \$10,000	MCNC Cybersecurity Risk Assessment and Testing Services Annual: \$10,000	Technology Department CTO - Dennis

<b>Board Biennial Priority 3.2: Define facility standards for 21st Century schools, identifying relevant data points, citing regulations that require upgrades, and establishing minimum stands for all facilities.</b>
<b>Key District Strategy 3.2.2: Ensure resources and technical infrastructure are sufficient to support modern classrooms and blended learning.</b>
<b>Strategic Technology Goal: Systems management and scalable services are implemented to support efficient and productive work</b>
<b>Key Metrics: Quantity, Replacement Part Cost &amp; Availability, Device Performance, Device Cost of Ownership</b>

Key Technology Strategy	Year 1	Year 2	Year 3	Responsible
ABSS will maintain wireless access in all classrooms in each school to support 2 devices per student without network degradation.	Annual: eRate	Annual: eRate	Annual: eRate	Telecommunications workgroup - Todd Fitch
ABSS will maintain network connectivity between each school site, the CO, and our Internet Service provider	<p>Upgrade large plant facilities' core switches</p> <p>Contingency Cost: \$13,000 x 13 = \$109,000 (plan is to incorporate this into new eRate funding formula should that proposal pass)</p>	<p>Upgrade 50% of small plant facilities' core switches</p> <p>Contingency Cost: \$8,500 x 10 = \$85,000 (plan is to incorporate this into new eRate funding formula should that proposal pass)</p> <p>Upgrade Central Services (Transportation, Maintenance, Sellars-Gunn, and CO) plant facilities' access switches</p> <p>Contingency Cost: \$3,300 x 24 = \$79,200 (plan is to incorporate this into new eRate funding formula should that proposal pass)</p>	<p>Upgrade 50% of small plant facilities' core switches</p> <p>Contingency Cost: \$8,500 x 10 = \$85,000 (plan is to incorporate this into new eRate funding formula should that proposal pass)</p>	Telecommunications workgroup - Todd Fitch
Students will use digital tools and software in blended learning environments (both face-to-face and online) that are designed for flexibly paced learning, guided access to content, student choice, and timely support	<p>Canvas LMS modules and courses and Google Classroom CMS will continue to be utilized to deliver a blended learning opportunity for students</p> <p>Canvas: \$50,000 Annually - currently budgeted in state 015</p> <p>Google: \$0</p>	<p>Canvas LMS modules and courses and Google Classroom CMS will continue to be utilized to deliver a blended learning opportunity for students</p> <p>Canvas: \$50,000 Annually - currently budgeted in state 015</p> <p>Google: \$0</p>	<p>Canvas LMS modules and courses and Google Classroom CMS will continue to be utilized to deliver a blended learning opportunity for students</p> <p>Canvas: \$50,000 Annually - currently budgeted in state 015</p> <p>Google: \$0</p>	Technology Department CTO - Dennis
The Systems Administration Workgroup will engineer technical solutions to automate and standardize work processes through backend server systems and integrated applications to improve the capacity to deliver educational	Data Center Virtualization: \$70,000	\$7,000	\$7,000	Systems Admin Workgroup - Tommaso

and administrative services.				
Provide enhanced backup and redundant information technology services to support student and staff access to resources	Install enhanced disaster recovery solution  Cost: \$30,000	\$0	\$0	Systems Admin Workgroup - Tommaso
Provide backup and redundant electrical services to support student and staff access to resources	Install power maintenance and backup to support the data center in the event of a localized power outage at CO  Generator Cost: \$50,000  UPS Cost: \$37,000	Install power maintenance and backup to support the data center in the event of a localized power outage at CTEC  UPS Cost: \$37,000	\$0	Operations - Dr. Thorpe
ABSS will provide transportation for each technician to provide onsite technical support	Procure 1 Work Van with storage, carrying capacity, and ladder racks for telecommunications team  Cost: \$30,000  Procure 2 Vans with Storage and carrying capacity for technicians  Cost: \$52,000	Procure 3 Vans with Storage and carrying capacity for remaining technicians  Cost: \$77,000	\$0	Lead Technician - Jason Scott

Board Biennial Priority 5.1: Evaluate current resources/programs/personnel for adequacy, effectiveness, and vertical alignment, taking into account student progression and identified gaps and needs in core curriculum, specialized programs, enrichment, and intervention/support.
Key Strategy 5.1.2: Identify and provide system-wide access to key instructional resources, leveraging system-wide purchasing.
Strategic Technology Goal: Systems management and scalable services are implemented to support efficient and productive work
Key Metrics: Quantity, Replacement Part Cost & Availability, Device Performance, Device Cost of Ownership

Key Technology Strategy	Year 1	Year 2	Year 3	Responsible
The systems administration workgroup will implement an online accessible digital ecosystem which provides a single portal of secured access	Evaluate & Compare NCEdCloud, ClassLink, and Clever service offerings	Evaluate & Compare NCEdCloud, ClassLink, and Clever service offerings	Evaluate & Compare NCEdCloud, ClassLink, and Clever service offerings	Systems Admin Workgroup - Tommaso

to staff and student digital resources.  The technology department will continue to facilitate purchasing of software to support lower costs	Potential: \$0 - \$70,000 depending on service  Coordinate purchasing timelines and POs	Potential: \$0 - \$70,000 depending on service  Coordinate purchasing timelines and POs	Potential: \$0 - \$70,000 depending on service  Coordinate purchasing timelines and POs	Technology Administrative Assistant - Cassie
The systems administration workgroup will expand support for automated solutions to provide 24 hour maximum provisioning of account access for new and transitioning staff and students to computers, instructional software, and other district managed digital resources.	Data Center Virtualization (same item as above)	Data Center Virtualization (same item as above)	Data Center Virtualization (same item as above)	Systems Admin Workgroup - Tommaso
The systems administration workgroup will provide support for timely access to and functionality of online instructional technology software	Add 1 Systems Administration Position - Grade 68  Cost: \$45,000 including benefits	Cost: \$45,000 including benefits	Cost: \$45,000 including benefits	Systems Admin Workgroup - Tommaso

<b>Board Biennial Priority 5.2: Align and target high quality professional development with resources, programming, and student needs, ensuring it is specific and dynamic for teachers, other instructional staff, and administrators.</b>
<b>Key Strategy 5.2.2: Develop and implement a comprehensive technology and infrastructure plan to address gaps and needs.</b>
<b>Strategic Technology Goal: Teachers are better equipped to deliver personalized instructional services through the skilled and efficient application of technology</b>
<b>Key Metrics: Licensure Renewals, Completion Documentation for Digital Citizenship and eLearning, Canvas completion reporting</b>

Key Technology Strategy	Year 1	Year 2	Year 3	Responsible
ABSS will hire and utilize Personalized Learning Coaches in a regional coaching model to support the technology integration professional learning needs of teachers at both the elementary and secondary levels.				District Learning Team

Teachers will maintain their licensure through the development of the NC Digital Learning Competencies: Leadership in Digital Learning, Digital Citizenship, Digital Content and Instruction, and Data and Assessment	Canvas modules and courses will continue to be utilized to deliver a blended learning opportunity for skill development  Canvas: \$50,000 Annually - currently budgeted in state 015	Canvas modules and courses will continue to be utilized to deliver a blended learning opportunity for skill development  Canvas: \$50,000 Annually - currently budgeted in state 015	Canvas modules and courses will continue to be utilized to deliver a blended learning opportunity for skill development  Canvas: \$50,000 Annually - currently budgeted in state 015	Regional Personalized Learning Coach(es)
ABSS will implement a comprehensive K-12 curriculum that develops digital citizenship learning and skills for all students and teachers that includes data privacy and security training for all stakeholders.	Implement CommonSense Media across the district through the Media Center Program at each school  Cost: \$0	Implement CommonSense Media across the district through the Media Center Program at each school  Cost: \$0	Implement CommonSense Media across the district through the Media Center Program at each school  Cost: \$0	School Media Coordinators
ABSS will implement professional development to ensure data privacy and security strategies are being implemented by staff without compromise of advancing curricular goals	Implement Techguard S.H.I.E.L.D. Cybersecurity eLearning from our AIG cybersecurity insurance company  Cost: \$0	Implement Techguard S.H.I.E.L.D. Cybersecurity eLearning from our AIG cybersecurity insurance company  Cost: \$0	Implement Techguard S.H.I.E.L.D. Cybersecurity eLearning from our AIG cybersecurity insurance company  Cost: \$0	Technology Department - CTO - Dennis