



**HOUSTON COUNTY
BOARD OF EDUCATION**
HIGH-ACHIEVING STUDENTS

Perry, Georgia

Technology Plan

Approved June 13, 2017

Superintendent of Schools

Dr. Mark Scott

I. Vision for Technology Use

The mission of the Houston County Board of Education is to produce high achieving students and our vision is that our system will be world-class. The objective of the Houston County Three Year Technology Plan is to support the

system mission and vision at all levels.

**a. District
Mission/ Vision
and Access**

Houston County is committed to the belief that the effective use of technology will enhance the quality of teaching and learning, promote engagement of students, and support the increase of student achievement. Houston County envisions an educational environment that is rich with opportunity for all learners to be exposed to the benefits of the latest emerging technology. In addition, staff utilizes technology to ensure efficiency and effectiveness in meeting the instructional needs of all students. This educational environment allows students the opportunity to be high achievers, life-long learners, and successful in an ever-changing society.

Houston County embraces technology to provide a 21st Century digital learning environment. All stakeholders share the importance of integrating technology in the classroom to enrich and enhance the learning environment for all students. Houston County is committed to providing staff, students, parents and all stakeholders with essential technology resources and support to ensure that all students are afforded high-quality learning experiences. The goal of this plan is to prepare students to be college and career ready in today's society, which necessitates the use of more digital content and resources.

The district implements technology resources equitably across all 39 campuses and programs. Enrollment drives the distribution of technology resources.

The Houston County Technology Plan has a specific vision to:

- Allocate instructional technology resources to ensure equity among all student populations.
- Provide instructional and administrative resources via a collaborative environment.
- Ensure our students and staff are literate in technology and demonstrate digital citizenship.
- Teach students to use technology tools to access, analyze and apply increasingly complex information to draw conclusions and make informed decisions.
- Integrate technology enhanced lessons and strategies into the classroom environment.
- Support stakeholder use of technology
- Provide the most modern technology hardware and software to enhance instruction.
- Continue to provide an infrastructure to support student use of “anytime/anywhere/any device” learning.
- Facilitate a more virtual, personalized and blended learning environment where students can use technology to connect and collaborate globally.
- Provide opportunities for accessing, monitoring, analyzing and reporting student performance data to immediately inform instructional planning and provide timely targeted feedback.
- Support schools in attaining STEM/STEAM certification.
- Improve communication between all district stakeholders and ensure receipt of relative information.
- Use technology to maximize and personalize professional learning for all district personnel.

- Maximize federal, state, and local funding sources to support professional learning in the effective integration of technology into curriculum, instruction, and assessment.
- Continue to implement current and emerging technology to provide rigorous educational opportunities for all students.

II. Current Reality

Identify your data sources. What data does your technology inventory survey tell you? Compose a narrative analyzing the gap in access to technology across the district. Address the following groups—instructional, administrative, parent/community, system readiness/system support—personnel/resources.

a. Access to Technology/Data Sources

More than \$20 million has been invested in network infrastructure and classroom technology tools/devices over the past 5 years to enable our district/schools to support next generation digital learners. This investment has been possible thanks to county voters approving a one-cent Education Special Purpose Local Option Sales Tax (E-SPLOST). Each academic classroom has a SMART interactive board with SMART Notebook software, audio kit, document camera, and a teacher workstation. The system also provided approximately 3,500 more computers to more than 100 labs as well as 53 portable interactive boards.

The technology department continues to upgrade to the latest version of Windows to provide teachers and students with the most advanced functionality possible. In addition, the system recently purchased a new software management system to provide the most efficient customer service when deploying technical support. The system recently upgraded Infinite Campus with Campus Instruction, which provides teachers with a planning tool. Student and parent portals have also been upgraded to include additional resources and student longitudinal data. The purchase of the iBoss content filtering system allows set parameters to ensure Internet safety and filtering. The district continues to promote digital citizenship by providing appropriate and professional guidelines for the use of the Internet to include social media.

As of the July 2017 Annual District Technology Inventory Survey, the Houston County School System has 16,086 instructional computers with a student population of 29,003. The Houston County School system has 1,918 total classrooms with a ratio of 1 to 1.80 instructional computers per student. The 2012 E-SPLOST, along with donations of computers by Robins Air Force Base, assisted in reducing the ratio of instructional computers per student.

Houston County has supported the use of technology in the classroom by increasing the number of classroom devices by more than 68 percent in the past five years. In addition, all core classrooms are equipped with an interactive board, projector and document camera. The system infrastructure continues to be upgraded in order to keep up with the demands of all of the new devices and software joining the network. Furthermore, each school has multiple wired and wireless computer labs. It is the district's plan to continue adding additional labs and devices at each school.

Houston County was one of very few systems in the State of Georgia to administer the 2016 Milestones state standardized assessment 100 percent online in grades 3-8. In grades 9-12, Houston successfully administered

more than 70 percent of the state mandated assessments online. The system's goal is to continue administering assessments online to promote more timely feedback and reduce administration costs.

The Houston County technology main internet circuit of 3.8GB of bandwidth is supplied through the state Peachnet program. The system currently employs a second internet circuit of 2GB to support administrative services and to provide resiliency and additional bandwidth. Eighty percent of the cost of the second 2GB internet circuit is funded through the E-rate program. The system funds the remaining 20 percent.

The system technology department has designed the system infrastructure with two Service Set Identifiers (SSID) on two separate Virtual Local Area Networks (VLANs) to provide customized secure internet connectivity. One VLAN is password protected for employees and the other is open to students for the Bring Your Own Device program (BYOD) and system guests. The BYOD open wireless network has limited Internet access with strict education content filtering. To manage and control the BYOD and HCBE Wi-Fi, the network division uses a wireless management system (WMS.) This system closely monitors security and performance. The iBoss content filtering system provides alerts and reports on wireless activity on both VLANs. Both wireless networks are protected by geo-filtering and application control filtering.

The HCBE WiFi that is designated for district employees uses Wireless Protection Authentication - Enterprise (WPA 2ENT.) In addition, a radius server is utilized to authenticate employees on the WiFi network. The district data center is expanding to include server and desktop virtualization. The system with financial support through the Connections To Classrooms grant, has begun the initiative of increasing the system's LAN capacity through upgrades to the network connections from 1G to 10G.

In addition, the system has received E-Rate funding to upgrade the entire Wireless Network in each school as well as upgrade to CAT 6 cabling in 10 schools with the greatest need. This project represents the system's commitment to ensuring the technology infrastructure meets industry standards to prepare for future increased instructional demand and emerging technology.

The district upgraded to Microsoft Office Pro Plus Education Enterprise software in June 2016. This suite provides students and teachers up to 5 free copies of Office that they can download and manage on any device. Teachers and students have online access 24/7/365 to all Microsoft applications including 1TB of OneDrive storage per student/teacher. All employees and students in grades 3-12 are provided a system email account, which in turn provides them with Office 365 and system network authentication inside the domain. To protect the privacy of our students, elementary and middle students cannot email outside of the system domain and high school student emails going outside of the system domain are restricted to specific education addresses.

Houston County has successfully implemented BYOD at all 39 campuses. The district provides supplemental classroom devices for students who do not have a personal device. In addition, the district fosters collaboration and

	<p>encourages teachers to allow students to collaborate and work together unless administering a summative assessment. By providing each school with wired and wireless computer labs as well as full implementation of the BYOD program, all students are able to access a variety of technology during the school day. In the future, the goal is to allow any student who has no access to technology at home the ability to checkout a mobile device through the media center.</p> <p>Technology plays a key role in society today; therefore, to prepare students for college and career readiness, it is imperative that they have the opportunity to become computer literate and resourceful. Ensuring every student has access to an electronic device and the Internet is vital to achieving this goal.</p>
<p>b. Technology Use</p>	<p>Houston County currently utilizes a wide variety of technology related tools to enhance the instructional process. Through the system's wide area network connecting all campus locations and offices, the system is able to provide optimal collaboration, communication and instructional resources. Students are allowed to bring their own devices (i.e. smart phones, tablets, etc.) to use for instructional purposes. Major software resources located in all schools include Surpass (school media services), TIENet, Munis, and Infinite Campus.</p> <p>The district website communicates online resources available to the learning community. Technology learning opportunities for students participating in after-school programs provide personalized enrichment and remediation. Currently the system is compiling a complete list of curriculum software and resources for all levels of instruction within the county. This compiled list will be published on the system's website to ensure easy access and communication of resources across the system.</p> <p>With the use of BYOD, using technology at school is the norm. The district offers courses teaching robotics, engineering, graphics, and automotive at the high schools. All of these courses have extensive technology equipment in the labs. Students receive extensive training including industry certification. Advanced Placement Computer Programming is offered at the high school level, as well as computer business and web design courses.</p> <p>Furthermore, for years our district has emphasized Science, Technology, and Engineering and Math (STEM) education. In 2015-16, two elementary schools earned Georgia Department of Education (GaDOE) STEM certification, the first in Middle Georgia to accomplish this certification. Several other elementary and middle schools are currently working toward GaDOE STEM certification. Students are very adept with the use of technology; many elementary students are learning basic coding and most of our schools participate in Hour of Code. Students at all levels are being trained to use digital lab discs that connect to a tablet utilizing an app to chart the data in real-time, which enable science experiments to focus on the concept rather than the collection of data. The system also has a district-wide STEM Robotics Club for our high school students, allowing competition opportunities at local, state and national levels.</p> <p>The Houston County School System supports virtual technology initiatives that assist in providing technology to support learning across the system,</p>

both at school and home. One of those initiatives, Georgia Virtual School, is a year-round, tuition-based program offering online courses developed and taught by certified teachers. Virtual learning instruction involves teaching students course content via the Internet. As in a traditional face-to-face classroom, teachers facilitate daily learning activities such as discussion, projects, labs, group work, and writer's workshop. By providing feedback, remediation, and enrichment, virtual learning instructors guide students through content approved courses that meet the requirements for the state mandated curriculum.

Students can participate in virtual classes during the regular school day at no cost under the state and local rules established to govern the Georgia Virtual School. Enrollment for the supplemental tuition-based program is not limited. Therefore, students have the opportunity to enroll in supplemental state tuition-based virtual classes beyond the school day. In addition, the district offers Advanced Placement and advanced math courses for eligible students through Georgia Virtual School. Students who would like to take advanced courses not offered at their high school are allowed to enroll in the virtual school course. Any and all students may enroll in online courses offered by the GaDOE Virtual School.

Houston County continues to employ alternative instructional methods for teaching core content at the system level as well. The goal is to provide a blended learning environment where technology supports instruction. For several years the district has utilized core content online learning programs designed to promote student achievement, beginning with NovaNet and currently using Edmentum and Odesseyware. At-risk high school students may participate in an on-line program in order to "catch-up" and get back on track for graduation. Both credit recovery courses and courses for initial credit are offered to students with support from highly qualified teachers.

Microsoft Office 365 Education Suite is the system-wide vehicle for collaboration and communication. Office 365 supports all intranet and Web applications across an enterprise within one integrated platform. Classroom Notebook is a new tool that will enable teachers and students to collaborate and communicate with ease. Each system level department has developed a collaborative workspace via Sharepoint. Curriculum and resources are housed within a site specific to each content area.

Professional development opportunities are made available at the school and system level to support instructional technology. The professional learning department works with administrators, teachers and central office personnel to redeliver professional learning as determined by system and school strategic goals. Staff may participate in some professional learning classes online or face-to-face. Three Curriculum Integration Specialists (CIS) are on staff to assist with professional learning services.

The Houston County Technology Plan's vision for technology use follows.

Students will:

- Effectively utilize interconnected technology to analyze, collaborate, process, and receive instruction/information.

- Utilize communication systems and real-time web-based applications to communicate with administrators, teachers, parents, and fellow students.
- Meet the challenge of an ever-changing global society and economy using technology resources, including BYOD.
- Participate in grade-level appropriate CIPA lessons annually.
- Learn safe, age-appropriate technology literacy and etiquette.

Teachers will:

- Utilize technology resources to enrich classroom instruction and increase student achievement.
- Endorse performance-based standards that define appropriate use of technology for students at each grade level.
- Access interconnected technology to analyze, collaborate, and disseminate instruction/information in a real-time environment.
- Utilize technology resources to actively engage students in their own learning process in a standards-based classroom.
- Use system provided global email, telecommunication systems, and real-time web-based applications to communicate with all stakeholders.
- Utilize technology resources to electronically retrieve, analyze, and produce reports.
- Access, via a secured network, essential organized classroom data. The available data includes disaggregation into appropriate programs/subgroups.
- Participate in appropriate professional learning opportunities.

Administrators will:

- Utilize technology resources to enrich the school's instructional program, increase student achievement and improve the overall effectiveness of school management.
- Access multiple data resources using technology to analyze, collaborate, and disseminate information in a real-time environment. Ensure that relevant school personnel have access to the appropriate information.
- Utilize technology resources to support teachers and staff in standards-based classroom instruction.
- Use system provided global email, telecommunications systems, cellular devices, and real-time web-based applications to communicate with all stakeholders.
- Utilize technology resources to electronically archive, retrieve, analyze, and produce reports.
- Access, via a secured network, essential organized school and classroom data. The available data includes disaggregation into appropriate programs/subgroups.
- Participate in appropriate professional learning opportunities.

Parents will:

- Access their child(ren)'s real-time grades, attendance, and other important student information through a web-based system (Infinite Campus).
- Be provided a wealth of important information through the system and school website, automated notification system, and social media.

	<p>Application Systems:</p> <ul style="list-style-type: none"> • Use technology resources to increase awareness of ways technology can motivate and encourage student learning in a standards-based classroom. • Use electronic assessment programs to evaluate the needs of students and immediately monitor their progress in meeting educational goals. • Use instructional software in several languages to assist Limited English Proficiency (LEP) students. • Provide internet connectivity with up to date content filtering, antivirus and spyware shields. • Acquire software that correlates to the state curriculum. • Provide technology resources and training in analyzing data. <p>Desired Technology Infrastructure:</p> <ul style="list-style-type: none"> • Provide a robust, stable, and secure network that continues to support the ever-growing demands of education technology. • Standardize and upgrade all necessary hardware. • Provide the technology to support an industry standard disaster recovery plan. • Provide competent and efficient technology support. • Provide assistive technology for students with disabilities.
<p><i>c. Gap Analysis</i></p>	<p>After reviewing the System Technology Inventory and compiling data, the system technology committee determined that an acceptable inventory of hardware and peripheral devices are currently available. Houston County has worked diligently to lower the student-to-computer ratio. Presently, the student-to-computer ratio is 1 to 1.80. However, the process of phasing out computers that no longer meet system hardware specifications must continue to maintain this ratio and to decrease the student-to-computer ratio to satisfy any future system goals. It is important that each classroom have equitable access to mobile devices to supplement the BYOD initiative thus providing classroom technology integration to all students.</p> <p>As classrooms rely more heavily on technology to implement engaging and relevant lessons, it will be imperative to continue to update to the latest classroom technology and increase bandwidth as necessary. All technology purchases must continue to be evaluated for compatibility with existing software. Technology purchases must also continue to align with the system’s vision and technology goal of providing a standardized solution that is equitable to all classrooms and meets the needs of all students as well as online testing requirements.</p> <p>In August of 2016, the Instructional Technology Committee (listed below) met to review system inventory data, create a survey and disseminate it to stakeholders for their feedback. The team was further divided into 3 subgroups: infrastructure, instructional technology, and professional learning. The committee evaluated the system’s current status with regard to instructional technology and the gaps that exist between our vision and current reality.</p> <p><u>Facilitator</u> Cindy Flesher, Deputy Superintendent</p>

Infrastructure Sub-Committee

Rose Powell, Director of Technology, Assessment and Accountability
Melva Sullivent, Tech Services Admin
Greg Hogan, Tech Services Specialist
Mike Folse, CIS, Professional Learning
Michelle Masters, Assistant Superintendent of School Operations

Instructional Technology Sub-Committee

Erin Gramley, Teacher
Mike Paalz, Teacher
Angela Heath, Teacher
Elgin Mayfield, Principal
Chuck Dumas, Coordinator of Assessment and Accountability
Larry Wadsworth, CIS, Professional Learning
Jenny McClintic, Director of Student Services
Stacy Daly, Media Specialist
David Bailey, Media Specialist
Melanie Watson, Coordinator of Social Studies
David McDermott, Director of CTAE
Eric Payne, Assistant Superintendent for Teaching and Learning
Steven Hornyak, System Intervention Specialist
Kelly Sharp, Assistant Principal for Discipline

Professional Learning Sub-Committee

Ashley Watkins, Teacher
Matt Hunt, Teacher
Lori Boyd, Teacher
Del Martin, Principal
Olethia Thomas, Assistant Principal for Instruction
Michele Casey, CIS, Professional Learning
Sharon Moore, Director of Professional Learning
Tambra Singletary, Media Specialist
Cassie Rape, Coordinator of Math
Gretna Soltis, Coordinator of Social Studies
Amy Barbour, Assistant Principal for Instruction

The greatest technology needs of the Houston County School System were identified as:

- Refresh teacher and administrative workstations
- Redesign Media Center technology to reflect 21st Century Media Centers. For example, installing flat panels for collaboration, creating charging stations, and purchase software to facilitate device collaboration
- Establish a disaster recovery plan
- Add additional classroom technology devices for student use to supplement BYOD.
- Provide schools with a refresh of mobile/wireless computer labs.
- Implement electronic software platforms that promote the system's "Go Green" initiative
- Create/complete transparent public documentation to comply with Senate Bill 89
- Streamline communication with parents through the local HCBE website

- Provide virtual learning opportunities before and after school
- Provide ongoing teacher training on effectively integrating technology, specifically SMART notebook software and Office Classroom Notebook/OneNote
- Provide assistance with the disaggregation of student data for administration and teachers
- Establish procedures and safe guards for future software purchases

The system's mission statement is to produce high-achieving students. To continue on this pathway, the system must narrow the achievement gap between state defined subgroups of students. Integrating technology into the instruction can assist with remediation program for these students. The data reveals that many such students attend the Title I schools in our system.

Special Education and ELL teachers were consulted to determine their hardware, software and resource needs. The Technology, Teaching and Learning and Student Services departments have combined resources to provide the support needed for the teachers to meet the achievement goals established for their students. The system employs additional Technology personnel to support the integration of curriculum, data collection and reporting support for the Student Services department.

Disaster recovery planning is a focus and is in progress. Disaster Recovery plans must be developed to ensure business continuity in the case of a disaster. It is essential to safeguard student data, provide uninterrupted payroll services, and reduce the impact to staff, students and the community in the event of a catastrophic event. Currently, Houston County does not have an off-site back-up system of business and administrative files. The system plan is to purchase storage devices to provide back-up and off-site storage of such files as soon as funds become available.

III. Communication and Marketing

a. Communication/Marketing

Houston County believes that effective communication with all stakeholders is vital. The year begins with teachers calling the students to welcome them and following up with an email through the SIS to welcome the parents. This simple activity opens the lines of communication. During Open House, all teachers write their email address visibly for parents to view. In addition, they communicate the various/specific ways in which to communicate electronically. Infinite Campus, our student information system, allows students, parents and teachers to communicate with one another inside the platform. Electronic alerts can be set up by the parent to be notified of specific events in real-time. Parents are informed of the link to sign-up for an account at the beginning of the year. This link is also posted on the system website and in the counselor's corner.

Houston County teachers utilize many other electronic communication methods. For instance, Microsoft Class Notebook provides real-time online collaboration with teachers, students and parents. Edmodo is another platform utilized by many teachers in the system as well. Teachers, parents and students of elementary and middle school love the Class Dojo platform where behavior points are communicated in real time. Fine arts, gifted, and athletic educators have created Facebook and Twitter pages to

	<p>share targeted information with their parents and students, allowing for two-way communication.</p> <p>Students in grades 3-12 are provided a district-issued email address. This enables students to utilize Office 365 for Education and download five free copies on devices at home. Office 365 OneDrive enables students and teachers to share files with one another. Office 365 also has a newsfeed component which promotes online communication.</p> <p>Our Employee Handbook contains the following statement: “Be responsive to parents; return phone calls and reply to e-mails or notes promptly.” This handbook also emphasizes the Georgia Department of Education Teacher Keys Effectiveness System (TKES) Performance Assessment which evaluates teachers on effective communication with stakeholders to include: “Engages in ongoing communication and shares instructional goals, expectations, and student progress with families in a timely and constructive manner.” Therefore, our teachers are also evaluated on their responsiveness and communication with parents.</p> <p>Multiple tools are used to share progress, disseminate evaluation results, and provide information to all stakeholders. This includes: district and school websites; social media - Facebook, Twitter, YouTube, Pinterest, Instagram and LinkedIn; Cox Cable channel 17 and ComSouth channel 10; School Councils; automated notification system; SharePoint portal; Infinite Campus; Frontline-Absence Management System; MySchoolBucks; and media releases. Board agendas and policies may be accessed through Simbli/eBoard on the website. Board meetings and select events are live steamed to increase public awareness and encourage participation. The website is kept current with accurate and timely text, photos and videos.</p>
<p><i>b. Integration/ coordination with long-range planning initiatives</i></p>	<p>Houston County coordinates long-range planning through a system Technology Committee that consists of personnel from the following school levels/departments:</p> <ul style="list-style-type: none"> • Teacher representatives - one each from an elementary, middle and high school level • Administrative representatives - one each from an elementary, middle and high school level • Media Specialist representatives - one each from an elementary, middle and high school level • Technology representatives • Professional Learning Director and all CIS • Teaching and Learning Asst. Superintendent and representatives from content areas • School Operations Asst. Superintendent • Student Services Director • Deputy Superintendent, serves as facilitator <p>All proposed technology initiatives are presented before and discussed with the technology committee. Major initiatives such as infrastructure needs, hardware and software purchases and implementation, technology related upgrades or purchases, and professional learning needs to support system and school level personnel are planned with input received from the committee. System technology needs assessments are generated modified and results reviewed within the technology committee.</p>

IV. Professional Development

a. Professional Development

The Houston County Professional Learning program is conducted according to the goals and priorities of the system. The Professional Learning program is clearly outlined and supports the overall system and school performance goals by addressing the assessed needs of all students, school and system personnel as identified through the analysis of student data, the evaluation of effectiveness of instructional programs and other means deemed appropriate by the school system. Professional learning is viewed as a necessary, continuous and systemic effort to improve district programs by involving all employees in activities that improve their skills and broaden their perceptions. Professional learning in the school system is directly linked to established instructional practices that support student achievement and the mission of the Houston County School System to produce high achieving students.

The Houston County School System has adopted the Learning Forward standards for Professional Learning. These standards are a necessary component of our vision for professional learning: Professional learning should be results-driven, standards-based and job-embedded. Personnel have the opportunity to participate in many types of high quality job-embedded professional learning opportunities. Examples of these opportunities include, but are not limited to, book studies, vertical study teams, study groups, coaching, unit planning, lesson studies, action research, journaling/reflecting, examination and analysis of student work, data analysis and interpretation, grade level collaboration, and teacher cadres. Professional Learning Communities are our overarching umbrella, or context, in which the work we do to improve the adult and student learning occurs.

In addition, the Professional Learning Department has three Curriculum Integration Specialists (CIS) on staff to assist teachers and administrators with the integration of technology into classroom instruction. The CIS are not tech support persons, but rather a team of classroom teachers that provide support in incorporating technology into the learning process by providing job-embedded professional learning specific to teacher and administrator needs.

The CIS support teachers and administrators in the following ways:

- Collaborating with teachers to demonstrate lessons integrating technology.
- Working with teachers one-on-one to develop and deliver technology integrated lessons.
- Training teachers on the use of technology within their classrooms,
- Delivering professional learning on technology integration during system and school professional learning days.
- Leading small group sessions with teachers and administrators, and providing one-on-one individualized professional learning.

Funding for professional learning is provided by local, state, and federal allocations. All professional learning conducted within the school system aligns with and reflects the goals identified in the system and school strategic plans regardless of funding source.

Goals, Benchmarks, and Strategies

Strategic Goal 1: Student Achievement

Goal -Ensure that each Houston County School provides high-quality instruction aligned with state standards.

- Action Step a-Develop and execute individual school strategic plans designed to demonstrate growth on the College and Career Readiness Performance Indicator.
- Action Step b-Implement a balanced assessment approach to include diagnostic, formative, and summative assessments to design and adjust instruction.
- Action Step c-Tailor student learning opportunities focused on student-centered learning, higher-order thinking, and problem solving to meet individualized learner needs and goals.

Strategies	Benchmark	Evaluation Method	Funding Source/Amount	Person Responsible
Implement effective use of instructional technology in all classrooms in order to provide next generation learning environments.	Formal and informal classroom observations by school and system administrators and support personnel.	Results of locally developed technology survey relating to instructional technology usage.	<p>FY2018-2020 Costs of refreshing teacher, administrator and support staff work stations. Qty: 2600 – SPLOST \$2,350,000</p> <p>FY 2018-2020 costs of refreshing academic and CTAE computer labs, 30 computers in each lab Qty – 2550 \$1,950,000</p>	System and School Administration Technology Dept. Teaching and Learning Dept. Professional Learning Dept. /CIS Teachers

			<p>FY 2018-2020 costs of adding mobile academic labs Qty-46 - if funding is available \$690,000</p> <p>FY2018-2020: Costs of adding 4-6 additional student classroom devices such 13" laptops or iPads if funding is available. \$2,000,000</p>	<p>Total - \$6,990,000</p>
Effective use of SharePoint to foster and support collaborative instructional planning/grade and vertical alignment with the state standards.	Monitor the usage of SharePoint for instructional collaboration and resources.	Increasing quantity of content posted on and usage of SharePoint.	No costs associated with current version of SharePoint with Microsoft 365 license.	System and school Administration Teaching and Learning Dept. Professional Learning/CIS/Teachers
Analyze data using technology through data dashboards and applications to identify areas of strengths and weaknesses. Provide professional learning and guidance for using data to guide informed decision-making.	<p>Student performance data posted to system and school webpages and SharePoint - reported to schools in a timely manner. Maintain and update Tableau interactive data dashboards.</p> <p>Train personnel in the effective use of GA DOE state longitudinal data system (SLDS.)</p>	Data document and dashboard logs provided in IC, Tableau and SharePoint. Classroom and school level usage reports for data such as pivot tables, charts, graphs, and the SLDS provided by the State DOE.	<p>No costs associated with GA DOE State Longitudinal Data System.</p> <p>FY 18-20 Annual Cost to renew and maintain Tableau Software: Local Funds \$35,000 per/yr.</p>	System & School Administrators Assessment & Accountability Dept. Teaching and Learning Dept. Professional Learning Dept./CIS Classroom Teachers Technology Dept.
Utilization of Interactive Boards for engaging students and integrating technology into the curriculum.	Formal and informal classroom observations by school and system administrators and support personnel.	Results of locally developed technology survey relating to instructional technology usage. Administrative Walk-through observations.	<p>FY18-FY20 -Cost of Smart Notebook Advantage Software with VE student response capabilities SPLOST \$70,560 /3 yr.</p> <p>Upkeep and maintenance of Classroom Technology SPLOST as funds allow/approx. \$550,000 /yr.</p> <p>Estimated Interactive Board refresh costs: \$3300 per classroom to replace what we currently have, \$5,000 to replace with flat</p>	Classroom Teachers School and System Administration Teaching and Learning Department Professional Learning Dept./CIS Technology Dept

			panel. \$6-\$9M	
Provide students and staff access to instructional technology for research and global connections that support the curriculum and educational goals of the school system.	10 Thin Clients in Primary and Elementary Schools 15 Thin Clients in Middle Schools 30 Thin Clients in High Schools	Monitoring of usage by Media Specialists.	FY 2018 - Costs of updating Media Centers to include flat panel collaboration areas with charging station. SPLOST: \$200,000	Media Specialists Technology Dept Teaching and Learning Department Professional Learning/ CIS
Instructional computer programs and resources to meet the educational needs of all students.	Student enrollment in computer based instructional programs.	Successful completion of participation in computer-based instructional programs.	FY 2018 Tie Net - Local Funds: \$74,971/yr. Georgia Virtual School \$250 per student Odysseyware Local Funds: \$30,000 FY 2018 MAP Assessment System 2 nd , 4 th & 6 th grades for screening and growth purposes Local funds: \$92,000/yr.	Classroom Teachers School and System Administration Teaching and Learning Dept. Student Services Dept. Technology Dept. School Operations
Provide students and staff anytime /anywhere access to web-based learning technology to collaborate, publish, and interact with others.	Implementation and maintenance of Office 365.	Analysis of student access and usage reports.	FY 2018 Microsoft Office Enterprise Subscription Annual Cost of ESplost Funds: \$120,000/yr.	Technology Department Classroom Teachers School and System Administration

Strategic Goal 2: Student and Stakeholder Engagement

Goal -Provide opportunities for shared-decision making among all stakeholders.

- Action Step a-Ensure a systematic approach to providing a safe learning environment for all stakeholders.
- Action Step b-Facilitate on-going, two-way communication through multiple forms of media.
- Action Step c-Provide opportunities for shared-decision making among all stakeholders.
- Action Step d-Increase strategic partnerships with business, post-secondary institutions, and community le

Strategies	Benchmark	Evaluation Method	Funding Source/Amount	Person Responsible
Afford students opportunities to learn and practice internet safety that meets the Child Internet Protection Act (CIPA) guidelines and the Houston County Schools acceptable internet use policy.	Monitoring lesson plans and classroom instruction by the school administration.	100% of schools with plans of teaching CIPA standards to students.	\$0 local funds	Classroom Teachers School Administration School Operations Professional Learning/ CIS

Utilize Checkpoint for school visitors and check outs to ensure a safe learning environment.	Monitor the effective use of the Ident-a-kid Software ensuring all visitors check in using the software.	Review reports to analyze the number of documented visitors as well as track student tardies and early dismissals.	FY 2018 Checkpoint software - \$200/school Local Funds: \$5,800/yr.	Technology Dept. School Administration School Office Staffs
Continue to implement and support BYOD in all schools.	Administrators observing students engaged in hands-on technology activities using their own device.	Number of devices connecting to our district's BYOD network.	Costs of maintaining a separate BYOD network: Local funds: \$0.00	System and School Administration Professional Learning Dept. Technology Dept. Teaching and Learning Dept. School Operations
Continue to provide a web-based student information system where teacher, student and parent have secure access to student information such as grades, attendance, assignments and behavior.	Monitor teacher, student and parent usage of Infinite Campus at the school and system level.	Usage reports from Infinite Campus.	FY 2018 Infinite Campus renewal: Local Funds: \$252,000/yr. FY 2018 Online Registration (OLR) Local Funds: \$7500/yr.	Teachers Parents Students School and System Administration Teaching and Learning Dept. Professional Learning Dept./CIS Technology Dept. School Operations
Provide communication technology tools for administrators, teachers, parents and students.	Monitor the effective use and implementation of the various communication technology tools.	Usage of the various communication technology tools.	FY 2018 Automated Notification System Local Funds: \$76,000/2yr. FY 2018 School In-Sites – Local funds 62,000/yr. Office 365 email-Microsoft license	Teachers Parents Students School Administrators Technology Dept. School Operations Dept.
The system will maintain and improve a wide area network (WAN) linking all campus local area networks (LANS) and system offices. All nodes on the WAN will have high bandwidth access to the Internet. Maintain firewalls, email and content filters at a central location to screen inappropriate sites and to insure that student access to the Internet will be	Monitor internet connectivity and resolve any issues as quickly as possible.	Analyze logs and reports in regards to network performance and issues.	Unite Private Network (UPN) E-Rate Funds \$502,822/yr. Local Funds \$215,495/yr. iBoss Content Filter - Local funds \$32,500/yr. Sonic Wall (Internet Firewall) Local Funds \$36,000/yr. Barracuda Email Filter Local funds \$4500/yr.	Technology Dept.

safe and rewarding.			AVG - Antivirus Local Funds: \$28,000/3 yr. Mobile Device Management (MDM) Airwatch- Local Funds \$10,000/yr. Additional 2 GB bandwidth through Windstream: Local/E-rate Funds: \$49,920 yr.	
Provide community with technology literacy classes though the career and technical educational program	Number of participants attending.	Number of participants completing courses.	\$0 local funds	Teaching and Learning Dept. School CTAE
Utilize a system Technology Committee made up of stakeholders to conduct a needs assessment, adjust, and develop a technology plan.	Participation at Committee Meetings.	A Technology Plan will be in place Analyze results of needs assessment Meeting Documentation	\$0 Local Funds	Technology Department Committee Members
The system will maintain and support a voice-over- IP solution within the network infrastructure.	Monitor tele-communication support through the district.	Results of locally developed technology survey relating to instructional technology usage.	VOIP Local Funds 30,000/yr. Support: Local Funds \$31,000/yr.	Technology Department
Provide all administrative personnel with hand-held cellular -based personal digital devices for communications and data access.	Purchasing department monitor usage of devices	24/7 access to data and communication services	Cell phones/data plans Local Funds \$252,000/yr.	Technology Department Purchasing Department
Utilize survey software to collect input and feedback from stakeholders.	Usage of surveys by schools and departments.	Effectiveness of the survey generator	Office 365 Forms \$0.00 Costs of other survey software.	School and System Administration

Strategic Goal 3: Organizational Effectiveness

Goal -Plan, implement, and monitor processes and procedures for organizational effectiveness.

- Action Step a-Provide a safe and efficient transportation program for the students of Houston

County.

- Action Step b-Provide students and staff with healthy-nutritious, and appetizing meals in an environment that promotes learning.
- Action Step c-Plan, construct, and maintain schools, classrooms, and facilities.
- Action Step d-Ensure equitable access, reliability, and use of system technology resources.
- Action Step e-Ensure efficient resource management, including fiscal and human capital.
- Action Step f-Recruit and retain highly qualified staff.

Strategies	Benchmark	Evaluation Method	Funding Source/Amount	Person Responsible
Utilize student information system to maintain student attendance, assessment and performance data, discipline referrals, accommodations, and other pertinent student-related documents.	Monitor usage of Infinite Campus.	Successful record keeping documentation.	Cost for Infinite Campus Renewal previously stated.	Technology Dept. School and System Administration Student Services Dept. School Operations Assessment & Accountability Dept. Teaching and Learning Professional Learning/ CIS Teachers
Maintain a comprehensive, accurate, and up to date inventory of all system technological devices including warranty information.	Accurate inventory for quick replacement of parts, planning for future refreshes, etc.	Inventory records and reports	Cost for Inventory Asset System - WASP \$7,500/year	Technology Dept. Warehouse Technician Title I Director Student Services School Administrators Purchasing Dept.
Provide critical updates and maintenance on technology equipment through the Helpdesk, imaging of computers, computer management and software distributed.	Effective utilization of software to provide maximum use of technology.	Analysis of reports reflecting number and status of Helpdesk tickets, current system update status, monitoring of software installation and identification of operating system concerns.	LanDesk Local funds \$40,000/yr.	Technology Dept. School and System Employees
Implementation of new system software for financial, human resource, benefits, nutrition and purchasing departments to improve administrative services and operations.	Monitor transition to and efficiency of new software system	Effective and efficient departmental processes Department Audit Results	MUNIS Financial Software – SPLOST \$250,000/yr.	Deputy Superintendent for Administrative Services Assistant Superintendent for Business Operations Technology Dept. System and school Administration School and System Employees

Strategic Goal 4: Learning and Growth

Goal 1-Build capacity for continuous improvement by ensuring meaningful and in-time professional learning that increases personnel effectiveness and student achievement.

- Action Step a-Expand a formal process for vertical articulation of the curriculum between each level.
- Action Step b-Facilitate job-embedded professional learning based on specified needs of personnel.
- Action Step c-Provide sustained job-embedded professional learning with school administrators and teachers to increase teacher and leader content knowledge and effectiveness.

Strategies	Benchmark	Evaluation Method	Funding Source/Amount	Person Responsible
Conduct high quality professional learning sessions to train teachers and administrators on effectively integrating technology in the classroom.	Participation in professional learning sessions.	Classroom observations and walkthroughs Student feedback	Local professional learning funds Title IIA Funds as available	Professional Learning Dept. / CIS Technology Dept. Teaching and Learning Dept. System and School Administrators Teachers
Conduct high quality professional learning for school and system level personnel on the effective use of technology tools to document, collect, analyze and utilize data to improve student achievement.	Participation in professional learning sessions	Evidence of effective utilization of technology tools/data documentation found in strategic and improvement plans.	Local professional learning funds Title IIA Funds as available	Professional Learning / CIS Technology Dept. Teaching and Learning Dept. System and School Administrators Teachers
Provide on-going training and support for HCBOE members to use technology for system administrative purposes.	Participation in training and utilization of technology	Board members, superintendent and board attorney conducting paperless board meetings. System and school staff utilizing technology to conduct school business.	\$0 - Local Funds	Technology Dept. Professional Learning Dept. / CIS System and School Administration
Conduct high quality professional learning for school and system level personnel on a variety of system and state computer programs /software to successfully collect report and submit required documentation.	Participation in training and utilization of technology	Evidence of accurate record keeping and reporting	Local professional learning funds	Technology Dept. Professional Learning CIS System and School Employees

Appendices

a. Policies and Procedures

The following pages contain the system's Acceptable Use Policy and CIPA policy and other policies that govern action

Policy IFBG – Internet Acceptable Use

The Houston County Board of Education recognizes the importance of making advanced technology and increased access to learning opportunities available to students and staff. The Houston County Board of Education believes that a “technology rich” classroom significantly enhances both the teaching and learning process. As resources permit, informational technology services shall be made available in schools.

Houston County School System personnel shall take all available precautions to restrict access to controversial materials, while recognizing that it is impossible to control all material which might inadvertently be discovered by users on a global network.

Purpose

The purpose of informational technology is to facilitate communications in support of research and education by providing access to multiple resources. Use by any student or staff member must be in support of and consistent with the educational objectives of the Houston County School System. The State of Georgia has passed laws which govern the use of computers and related technology. The Georgia Computer Systems Protection Act specifically forbids computer misuse and abuse. The Children’s Internet Protection Act (CIPA) enacted by Congress in 2000 also provides guidance and regulations concerning students’ computer use and access to content over the internet.

Authorized User

An authorized user for the purpose of this policy will be defined as any employee, student, or guest of the Houston County School System who has been issued and assigned a log-in account. By using the computing resources of the Houston County Public Schools, the user agrees to abide by the guidelines and rules governing this.

Terms and Conditions

An individual’s use of the computing resources of the Houston County Schools is not an absolute personal right; rather, it is a privilege, conditional on the individual’s compliance with state and federal laws, the Houston County Schools’ policies and regulations, school regulations, and satisfactory behavior involving technology. Inappropriate use, including any violation of these conditions and policies, may result in cancellation of the privilege. The Houston County School System has the authority to determine appropriate use and may discipline, deny, revoke, or suspend any user’s access at any time based upon the determination of inappropriate use.

It is the intent of Houston County School System to adhere to the provisions of copyright laws as they relate to informational technology. Transmission of any material in violation of United States Law or state regulations is prohibited. This includes, but is not limited to, copyrighted material, threatening or obscene material, or material protected by patent.

Users are not allowed to purchase, download or load software without written permission from the HCBOE Technology Services Center or Director of Information Technology.

Use for commercial activities, product advertisement, or political lobbying is prohibited.

The use of all school and central office networks shall be for the exchange of information in order to promote and support educational excellence in the school system.

Encounter of Controversial Material

The Houston County School System has a right and will make every effort to control the content of data accessed through the Internet by the use of firewalls and filtering software and teacher monitoring. Users may encounter material which is controversial. It is the user's responsibility not to initiate access to controversial material purposely. If such material is accessed accidentally, the student/teacher shall notify an adult teacher/supervisor immediately.

Vandalism and Harassment

1. Vandalism is defined as any malicious attempt to harm, modify, or destroy data of a system or another user.
2. Harassment is defined as the persistent annoyance of another user or the interference in another user's work.
3. Vandalism and harassment will result in cancellation of user privileges.

GUIDELINES

Network Guidelines

1. Users will not post, publish, send or intentionally receive offensive messages or pictures from any source, including but not limited to any defamatory, inaccurate, abusive, obscene, profane, sexually oriented, threatening, racially offensive, sexist or illegal material. Access to materials "harmful to minors," as that term is defined in the Children's Internet Protection Act of 2000 shall be restricted.
2. Users will not transmit or download information or software in violation of copyright laws. Only resources for which the author has given expressed consent for on-line distribution can be used. All users should consider the source of any information they obtain as well as the validity of that information.
3. Posting messages and attributing them to another user is prohibited.
4. Downloading of non-instructional materials from the Internet is unacceptable.
5. Disclaimer:
The Houston County Board of Education makes no warranties of any kind, whether expressed or implied, for services through the Internet. It denies responsibility for the accuracy or quality of information obtained through Internet services. The school system shall not be responsible for any damages a user suffers, including loss of data resulting from delays, non-deliveries, mis-deliveries, or service interruption. Use of information obtained via the Internet is at the user's own risk.

E-Mail Guidelines

1. All users are expected to abide by accepted rules of e-mail user etiquette. These rules include but are not limited to the following: be polite, never send or encourage others to send abusive messages, and use appropriate language. E-mails are not guaranteed to be private.
2. Mass distribution e-mails must be approved by a school administrator.
3. Opening and forwarding any e-mail attachments from unknown sources and/or that may contain viruses is prohibited.
4. No internet e-mail is allowed except for that provided by the Houston County BOE.

Social Networking

For the purpose of this policy, social networking shall be defined as any web-based program where students and faculty may engage in conversational exchange of information. These facilities shall include, but are not limited to, messaging, blogs, and wikis.

Social networking shall only be permitted to be accessed from within the Houston County Educational Network with the supervision/monitoring by a teacher or school administrator.

Authorized users may access the network via their personal user ID and not that of someone else. Users should not share their personal user IDs with any other person.

School Responsibilities

Schools shall ensure that all faculty, staff and students are aware of the rights and responsibilities of acceptable informational technology use contained in Houston County BOE policies.

Student Responsibilities

1. Students will observe the standard of courtesy and behavior consistent with the practices and policies of the Houston County Board of Education when sending or publishing messages or transmitting data or other information on the Internet.
2. Students will access the network using their personal ID and not that of someone else. Students will not share their user IDs, passwords, user log-on accounts with others and must make all efforts to safeguard any information from unauthorized users.
3. Students may not attempt to access information for which they are not authorized.
4. Students will use informational technology for instructional purposes only as it relates to classroom and co-curricular assignments and activities. Students will not use the system for any purpose if it is in violation of the law.
5. Students must receive permission from a teacher or designated personnel prior to accessing the Internet or any other specific file or application.
6. Any student who identifies a security problem must notify an adult teacher, supervisor or administrator immediately.
7. Students may not have access to an employee's workstation under an employee ID and may be subject to disciplinary action if such attempt is made.
8. Students are violating network security if they enter the system under a user ID other than one that is assigned to them and may be subject to disciplinary action.
9. Students disconnecting network components are guilty of harming network integrity and/or security, and will be subject to disciplinary action.
10. Students are violating network security if they alter programs or data on any network file server or any system's hard disk, and will be subject to disciplinary action.
11. Students are violating network security and software copyright laws if they knowingly use illegal copies of software on any school computer, and will be subject to disciplinary action.
12. Students purposely infecting any HCBOE computer with a malicious code will be subject to disciplinary action.

ADOPTED: 2/13/96

REVISED: 5/28/02; 7/8/03; 6/10/08; 9/14/10; 4/9/2013

HOUSTON COUNTY SCHOOL SYSTEM