



# Hanover County Public Schools

*Long Range Educational Technology Plan*

*2013-2019*

Adopted June 10, 2013

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## **Introduction**

In late 2012, a new Long Range Educational Technology Planning committee was established. The mission of this planning group was to revise the six year educational technology plan for the school division. The goal of this group was to develop a robust plan which would support learning through the integration of technology into the architecture of the modern classroom.

The following guidelines / parameters for the development of the Long Range Educational Technology Plan 2013-2019 were established at the beginning of the planning process:

- Build on the success of previous work and prior investments related to the integration of technology to support teaching and learning
- Be grounded in sound research
- Reflect input from a variety of stakeholders
- Consider the needs of all curriculum areas
- Enhance the framework for educational technology decisions in the future
- Create a plan that will guide technology integration across the division over the next six years

The goals of the 2013-2019 plan are aligned with the Virginia Department of Education 2010 Educational Technology Plan for Virginia as well as with Hanover County Public Schools' 2012-2018 Long-Range Plan.

Members of the planning team were representative of stakeholders throughout the division. The process was facilitated by Dr. Karen Richardson, educational consultant with Ivy Run Consulting.

The planning team members are:

Assistant Superintendent of Instructional Leadership

Dr. Daryl Chesley

Director, Curriculum & Instruction

Ms. Debbie Arco

Director, Elementary Education

Dr. Tricia Miller

Director, Secondary Education

Dr. Robert Staley

Director, Technology Services

Ms. Theresa Hechler

Principal, Atlee High School

Ms. Jennifer Cohodas

Principal, Chickahominy Middle School

Mr. Mark Beckett

Principal, Kersey Creek Elementary School

Dr. Deborah Waters

Professional Development Coordinator

Dr. Amy Thompson

Instructional Technology Resource Teacher

Ms. Rebecca Narron

Computer Science / CTE Teacher

Ms. Rebecca Dovi

## **Executive Summary**

Hanover County Public Schools is a student-centered, community-driven school district that provides a quality education for lifelong success.

The integration of technology is a division-wide goal to prepare students for a technologically changing world. Our vision for the division is that all students and staff in Hanover County Public Schools will have equitable access to technology that enables, empowers, and encourages quality teaching and enhanced learning for a changing world.

The ability to utilize technology, both in and out of the classroom, is vital to the success of our students. Technology plays an important role in teaching and learning, and our schools strive to integrate technology into all aspects of curriculum, instruction and school management.

The success of the previous six-year plan built a robust technology infrastructure for the division. This infrastructure has provided a strong foundation on which to build a Long Range Educational Technology Plan. The Planning team has developed five goals which are based on a continuous improvement framework for technology planning. These goals are designed to provide an effective learning environment for all students which is enhanced through the purposeful use of technology. Strategies and action targets have been developed for each goal of the plan.

In 2007, the Instructional Technology Advisory Committee [ITAC] was formed. The mission of this group was to act as an executive steering committee for the governance of the Long Range Educational Technology Plan. The 2013-2019 planning team recommends the continuation of an Instructional Technology Advisory Committee [ITAC]. New representatives from stakeholder groups will be appointed to ITAC and will function as an executive steering committee for the 2013-2019 Long Range Educational Technology Plan. Action committees will be formed to work on action plan items throughout the duration of the plan, and will report back to ITAC. ITAC will meet regularly throughout the year to review and assess progress related to the Long Range Educational Technology Plan and will present their recommendations and comments to the division's management team.

## **Educational Technology Vision**

The integration of technology is a division-wide goal to prepare students for a technologically changing world. The Educational Technology vision for the division is that all students and staff in Hanover County Public Schools will have equitable access to technology that enables, empowers, and encourages quality teaching and enhanced learning for a changing world.

The Long Range Educational Technology Plan and the goals for Hanover County Public Schools directly support the division's vision, mission, goals, and beliefs.

### ***Hanover County Public Schools Vision Statement***

To be recognized as a leader in education by building on our Tradition of Excellence

### ***Hanover County Public Schools Mission Statement***

Hanover County Public Schools is a student-centered, community-driven organization that provides a quality education for lifelong success

### ***Hanover County Public Schools Long Range Goals***

- To provide the highest quality education and appropriate support for each student while meeting and exceeding state, national, and international standards
- To employ and retain highly qualified staff
- To ensure safe, secure and efficient facilities and learning environments
- To increase and sustain family involvement, community partnerships, and student engagement
- To proactively manage resources effectively and efficiently

### ***Hanover County Public Schools Statement of Beliefs***

- We must foster a learning environment that is safe, caring, healthy and positive
- We believe a quality education encourages each child and challenges him or her to develop an individual path to success
- We believe a safe, supportive and collaborative environment is essential to student development and achievement
- We believe highly qualified staff, and dedicated parents and volunteers, make the greatest positive impact on student learning
- We believe in preparing all children to be contributing, productive members of our diverse, global society
- We believe that excellence is the standard for continuous improvement in teaching and learning
- We believe the continued success of the school system is dependent upon strong community partnerships
- We believe learning is a lifelong process

## **The Role of Instructional Technology in Hanover County Public Schools**

The integration of technology into the curriculum in support of the architecture of the modern classroom is an integral part of the teaching and learning environment. A modern classroom is a technologically equipped, globally aware, and student centered classroom with a focus on producing digital citizens who are collaborative creators, critical thinkers, and creative problem solvers.

With the implementation of the 2013-19 Long Range Educational Technology Plan, the division will operate under the following guidelines:

- Technology will be distributed to meet the specific and unique needs of schools, disciplines, and grade levels
- Hardware and software will be managed at the district level to ensure consistency and alignment to the curriculum
- Schools will be provided guidance by the Instructional Leadership Department and ITAC in selecting technological tools to meet the needs of their specific learning communities
- Technology resources will be adapted to the different styles of learning. Teachers will receive ongoing professional development to aid with the integration of technology in the classroom
- Building leaders and curriculum specialists will utilize technological tools to assist in the delivery of remedial and accelerated learning opportunities
- Technology resources will be integrated into the curriculum and will support the architecture of the modern classroom
- Software systems and programs will be evaluated annually for efficacy
- Instructional staff will continue to receive deliberate and ongoing professional development in the integration of technology into the learning environment

The Long Range Educational Technology Plan places the highest priority on technology which enhances teaching and learning. The division will continue to provide the following:

- A robust and flexible technological and human infrastructure designed to support and enhance the learning environment in each school
- The division will continue to invest in sustainable and reliable infrastructure to include wired and wireless devices with access to school, division, internet and cloud resources
- Necessary hardware, software and teacher training to implement a technology integrated architecture of the modern classroom

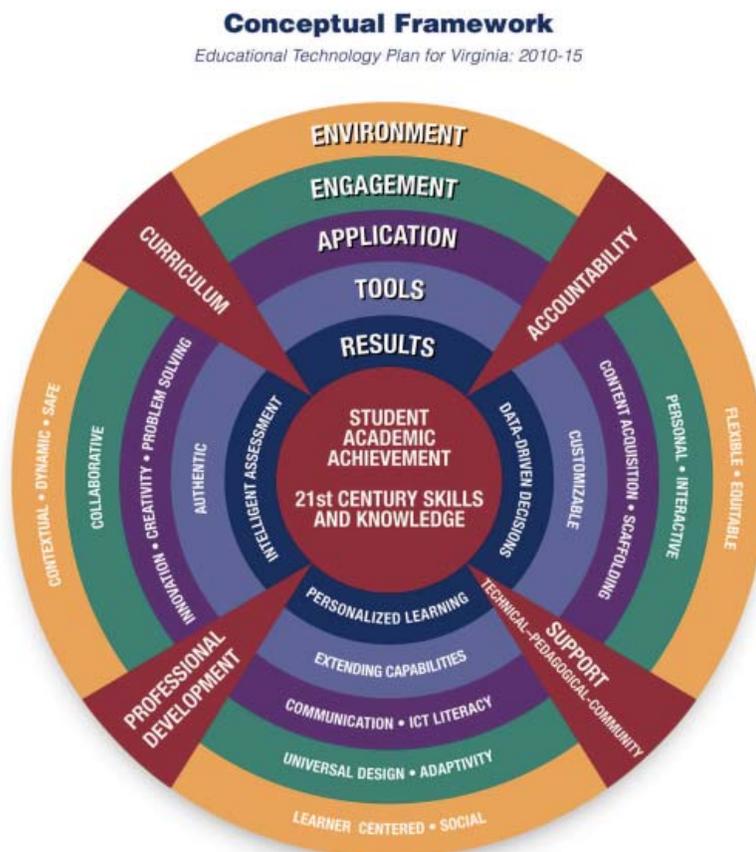
## The Technology Planning Process

The current technology plan was adopted in July 2007 and will be completed in June 2013. A Long-Range Educational Technology Planning Team was assembled in late 2012 to develop a new Long Range Educational Technology Plan for 2013-2019.

The team represented stakeholder groups throughout the division. Dr. Karen Richardson of Ivy Run Consulting was the group facilitator. As Dr. Richardson had helped facilitate the previous plan, she brought experience with and knowledge of the division which helped her provide effective guidance to the team.

The first planning session of the team was used to review the previous plan and discuss the vision for technology integration as it relates to the recently adopted long range plan.

The plan development process was focused around the Essential Conditions developed by the International Society for Technology in Education (ISTE). These are the necessary conditions to effectively leverage technology for learning ([www.iste.org/docs/pdfs/netsessentialconditions.pdf](http://www.iste.org/docs/pdfs/netsessentialconditions.pdf)). The team used these conditions to identify areas of strength and weakness in Hanover County Schools as well as both opportunities and challenges the division will face as it implements the new plan.



*Needs Analysis, Data Gathering and Goal Development:*

Outside the planning group, a needs analysis was facilitated by Dr. Richardson with various focus groups. A series of questions were asked to a cross-section of stakeholders in face-to-face discussion.

Focus and small group interviews were conducted with students, parent, teachers, principals, Instructional Technology Resource Teachers and the Superintendent.

Each group was asked to consider their experiences with technology use as well as their vision for that use going forward. Parents were asked to consider their child's experience with technology in the division. The interviews were audio-recorded. Aggregated results from these interviews were shared with the planning committee (see appendix 4).

Based on analysis of the data collected, strategies were developed by the planning committee that would help meet the division's long range goals as well as the goals and objectives outlined in the State's Educational Technology Plan. These strategies will serve as the focal points for the new Long Range Educational Technology Plan. These strategies represent the division's continued mission to provide access to high-quality resources for educational technology that support teaching and learning. These goals are depicted in the framework above and are designed to create a cycle of continuous improvement for technology planning.

Goal #1: Provide a safe, flexible, and effective learning environment for all students
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**Objectives:**

**1-1.** Deliver appropriate and challenging curricula through face-to-face, blended, and virtual learning environments

**Strategy 1-1.1:** Continue to develop online course offerings

*Action Plan:*

1-1.1-1: By May, 2014 the online cohort will complete development of courses in Algebra I, Geometry, Algebra II, English 12, Oceanography, Spanish 1, and Education for Employment

**Strategy 1-1.2:** Partner with higher education to develop online courses

*Action Plan:*

1-1.2-1: Continue online certification cohort partnership with VCU

1-1.2-2: Expand interest for enrollment for additional cohorts

1-1.2-3: Explore the capacity to develop online components for CTE courses

**1-2.** Provide the technical and human infrastructure necessary to support real, blended, and virtual learning environments

**Strategy 1-2.1:** Refine, communicate and monitor division level expectations for various school-level technology support positions including technical systems operators, technology coaches, instructional technology resource teachers, and media specialists

*Action Plan:*

1-2.1-1: A committee comprised of individuals from Technology Services, Instructional Leadership, and Human Resources will review and align job descriptions and responsibilities for instructional technology support positions and communicate to ITAC and stakeholders

**Strategy 1-2.2:** Provide portable computing device to professional teaching staff to develop additional skill sets and enhance instructional responsibilities

*Action Plan:*

1-2.2-1: Conduct a needs assessment for teaching devices and develop an implementation plan including professional development and acceptable use

1-2.2-2: Develop a funding initiative for initial purchase, support, and sustained use of a portable computing device for all professional teaching staff

**Strategy 1-2.3:** Provide portable computing device to students to develop additional skill sets and enhance instructional responsibilities

*Action Plan:*

1-2.3-1: Conduct a needs assessment for instructional devices and develop an implementation plan including professional development and acceptable use

1-2.3-2: Develop a funding initiative for initial purchase, support, and sustained use of a portable computing device for all professional teaching staff

**Strategy 1-2.4:** More effectively meet the Virginia Department of Education Standards of Quality staffing expectation for a 1 to 1,000 model for Instructional Technology Resource Teachers (ITRT)

*Action Plan:*

1-2.4-1: Develop a funding initiative to incrementally fund an additional 10 ITRT positions

**1.3:** Provide high-quality professional development to help educators create, maintain, and work in a variety of learner-centered environments

*Strategy/Action Plan:*

1-3.1-1 Continue to develop and enhance professional development models and modules

<b>Goal #2:</b> Engage students in meaningful curricular content through the purposeful and effective use of technology
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**Objectives:**

**2-1:** Support innovative professional development practices that promote strategic growth for all educators and collaboration with other educators, content experts, and students

**Strategy 2-1.1:** Build online professional development offerings

*Action Plan:*

- 2-1.1-1: Develop an introduction to online teaching module for teachers interested in developing coursework
- 2-1.1-2: Continue to develop online professional development courses for a planned spring 2014 rollout
- 2-1.1-3: Establish evaluation criteria for assessing the quality of online professional development offered by outside sources

**Strategy 2-1.2:** More effectively meet the Virginia Department of Education Standards of Quality staffing expectation for a 1 to 1,000 model for Instructional Technology Resource Teachers (ITRT)

*Action Plan:*

- 2-1.2-1: Develop a funding initiative to incrementally fund an additional 10 ITRT positions

**2-2:** Actualize the ability of technology to individualize learning and provide equitable opportunities for all learners

**Strategy 2-2.1:** Include technology integration in 21st century skills modules

*Action Plan:*

- 2-2.1-1: Ensure that all professional development sessions are designed to reinforce the integration of technology into the architecture of the modern classroom

**2-3:** Facilitate the implementation of high-quality Internet safety programs in schools

**Strategy 2-3.1:** Review and continue a heightened awareness of the current iSafe program

*Action Plan:*

- 2-3.1-1: Continue defining instructional roles to clearly ascertain the appropriate instructional staff for iSafe instruction
- 2-3.1-2: Conduct ongoing professional development for iSafe instructors

**Strategy 2-3.2:** Update content in the iSafe program to meet changing demands of social media

*Action Plan:*

2-3.2-1: Review objectives of the program to support the student learning environment

2.3.2-2: Develop new iSafe units to target content such as Digital Citizenship (grade 5), Virtual Citizenship (grades 7-8), and Online Learning (high School)

**Strategy 2-3.3:** Review and revise the Acceptable Use Policy to meet demands of new technologies and increased network access

*Action Plan:*

2-3.3-1: Institute a sub-committee of ITAC to study and make revisions

2-3.3-2: Revise the divisions BYOD (Bring Your Own Device) Policy to meet instructional needs

<b>Goal #3:</b> <b>Afford students with opportunities to apply technology effectively to gain knowledge, develop skills, and create and distribute artifacts that reflect their understandings</b>
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**Objectives:**

**3-1:** Provide and support professional development that increases the capacity of teachers to design and facilitate meaningful learning experiences, thereby encouraging students to create, problem-solve, communicate, collaborate, and use real-world skills by applying technology purposefully

**Strategy 3-1.1:** Provide teachers with portable computing device to access online professional development

*Action Plan:*

3-1.1-1: Conduct a needs assessment for teaching devices and develop an implementation plan including professional development and acceptable use

3-1.1-2: Develop a funding initiative for initial purchase, support, and sustained use of a portable computing device for all professional teaching staff

**Strategy 3-1.2:** Continue the division's 21<sup>st</sup> Century Skills initiative (Architecture of the Modern Classroom)

*Action Plan:*

3-2.2-1: The division will continue to develop and enhance professional development opportunities to support the architecture of the modern classroom

**3-2:** Ensure that students, teachers, and administrators are Information and Communications Technologies (ICT) literate

**Strategy 3-2.1:** Identify relevant ICT literacy skills and practices for students, teachers, and administrators

*Action Plan:*

3-2.1-1: Develop continuum of skills for students based on the state student technology standards

3-2.1-2: Provide professional development for instructional staff on student technology standards

3-2.1-3: Develop continuum of skills for teachers and leaders based on the National Education Technology Standards (NETS)

**3-3:** Implement technology-based formative assessments that produce further growth in content knowledge and skills development

**Strategy 3-3.1:** Continue the development of formative assessments with an emphasis on TEI (technology enhanced items)

*Action Plan:*

3-3.1-1 ITRTs and lead teacher specialists (curriculum leads) will continue to provide relevant professional development related to content and technical development

**Goal # 4: Provide students with access to authentic and appropriate tools to gain knowledge, develop skills, extend capabilities, and create and disseminate artifacts that demonstrate their understandings**

**Objectives:**

**4-1:** Provide resources and support to ensure that every student has access to a computing device

**Strategy 4-1.1:** Evaluate the inventory of division and school-based resources and determine the use of student-provided devices as well as access patterns

*Action Plan:*

4-1.1-1: Review data collection for division provided devices

4-1.1-2: Develop data collection tool for use during the 2013-2014 school year discovery of student-owned devices

4-1.1-3: Analyze data and make recommendations for instructional use of personal devices to ITAC

**Strategy 4-1.2:** Sustained funding over time to provide technology and human infrastructure to support demands

*Action Plan:*

4-1.2-1: Continue to develop capacity plans for sustained programs and investigate needs for new initiatives

**4-2:** Provide technical and pedagogical support to ensure that students, teachers, and administrators can effectively access and use technology tools

**Strategy 4-2.1:** Share best practices related to instructional use of computing devices

*Action Plan:*

4-2.1-1: Develop, revise and implement professional development to communicate best practices for use of mobile and standard computing devices

**Strategy 4-2.2:** Develop instructional expectations for use of student-owned computing devices

*Action Plan:*

4-2.2-1: Form a committee of K-12 classroom teachers and building administrators to assist in creating guidelines

**4-3:** Identify and disseminate information and resources that assist educators in selecting authentic and appropriate tools for all grade levels and curricular areas

**Strategy 4-3.1:** Create division level guidelines for use of technology funds available at the school level

*Action Plan:*

4-3.1-1: Institute an ITAC sub-committee to clarify and communicate guidelines

**Goal 5#:** Use technology to support a culture of data-driven decision making that relies upon data to evaluate and improve teaching and learning

**5-1:** Use data to inform and adjust technical, pedagogical, and financial support

**Strategy 5-1.1:** Fully implement the SchoolNet assessment system and PowerSchool student information system

*Action Plan:*

5-1.1-1: Train administrators on SchoolNet and PowerSchool data analysis

5-1.1-2: Establish measurement tools to assist administrators in their evaluation process

**5-2:** Provide support to help teachers disaggregate, interpret, and use data to plan, improve, and differentiate instruction

**Strategy 5-2.1:** Provide initial and ongoing professional development on the use of the SchoolNet data repository and use data to differentiate instruction

*Action Plan:*

5-2.1-1: Set ongoing expectations for teacher analysis of student data and differentiation in instruction

5-2.1-2: Conduct a study to determine the feasibility of providing half day professional development sessions in future school calendars

5-2.1-3: Assist teachers in utilizing the tools available to them for teacher evaluation

**5-3:** Promote the use of technology to inform the design and implementation of next-generation standardized assessments

**Strategy 5-3.1:** Fully implement the SchoolNet assessment system feature to create next-generation standardized assessments

*Action Plan:*

5-3.1-1: Engage Lead Teacher Specialists in further developing assessment tools

5-3.1-2: Provide ongoing professional development for teachers in creating classroom-based assessments

## **Closing**

The primary focus of the Educational Technology Long Range Plan 2013-2019 is to enhance the teaching and learning environment using technology tools while supporting the architecture of the modern classroom.

The development of the plan involved various stakeholder groups to help formulate a comprehensive long range plan for educational technology for Hanover County Public Schools. This cooperative effort assisted the planning team in developing the new Long Range Educational Technology Plan.

The Long Range Technology planning team feels that this plan will address the educational technology needs of Hanover County Public Schools teachers, staff, and students for the next six years and will provide a comprehensive planning tool for the future. In addition, all goals and targets for the plan are aligned with the Virginia Department of Education's Educational Technology Plan as well as the division's long range goals and strategies.

Finally, the Long Range Technology planning team would like to thank all those who contributed to the planning process. The information provided us was invaluable in the formulation of the plan and we appreciate the efforts of everyone involved.

# Hanover County Public Schools

## ***APPENDIX 1***

*Educational Technology Long Range Plan  
2013-2019*

*Funding and Budget*

# HANOVER COUNTY PUBLIC SCHOOLS

## FY2013-2014 Operating Budget

### Capital Improvements Program

#### **Process**

The Capital Improvements Program (CIP) is the School's plan for expenditures on facilities, equipment, and vehicles over the next five fiscal years. Capital improvements are separated from the annual operating budget because they include any proposed public construction, acquisition of land, buildings and accessory equipment, or vehicles or equipment with a unit cost greater than \$50,000. The Code of Virginia provides that a CIP be prepared to carry out policies adopted through the Comprehensive Plan. The CIP performs this function by outlining anticipated projects by year, by cost and by recommended funding source. The Comprehensive Plan includes the Community Facilities Plan, which along with the CIP provides for capital improvements necessitated by growth for a twenty year period. Hanover County Schools has maintained compliance with capital outlay programs as stated in Section 15.2-2239 of the Code of Virginia as follows:

*"Local planning commissions to prepare and submit annually capital improvement programs to governing body or official charged with preparation of budget. -- A local planning commission may, and at the direction of the governing body shall, prepare and revise annually a capital improvement program based on the comprehensive plan of the locality for a period not to exceed the ensuing five years. The commission shall submit the program annually to the governing body, or to the chief administrative officer or other official charged with preparation of the budget for the locality, at such time as it or he shall direct.*

*The capital improvement program shall include the commission's recommendations, and estimates of cost of the facilities, including any road improvement and any transportation improvement the locality chooses to include in its capital improvement plan and as provided for in the comprehensive plan, and the means of financing them, to be undertaken in the ensuing fiscal year and in a period not to exceed the next four years, as the basis of the capital budget for the locality. In the preparation of its capital budget recommendations, the commission shall consult with the chief administrative officer or other executive head of the government of the locality, the heads of departments and interested citizens and organizations and shall hold such public hearings as it deems necessary."*

The purpose of having a CIP is to assess the existing condition and identify needs which must be addressed to accomplish planning goals. A principal goal is to provide for the orderly and timed development of land consistent with the ability to provide services in accordance with the Comprehensive Plan.

**HANOVER COUNTY PUBLIC SCHOOLS**  
**FY 2013-14 Operating Budget**  
**Summary of Sources and Uses - Capital Improvement Plan**

<b>Funding Sources</b>												
County Transfer	\$	2,300,000	\$	3,590,000	\$	3,702,000	\$	4,450,000	\$	4,633,000	\$	18,675,000
Debt		1,000,000		1,000,000		1,000,000		27,400,000		31,200,000		61,600,000
<b>Total Funding Sources</b>	<b>\$</b>	<b>3,300,000</b>	<b>\$</b>	<b>4,590,000</b>	<b>\$</b>	<b>4,702,000</b>	<b>\$</b>	<b>31,850,000</b>	<b>\$</b>	<b>35,833,000</b>	<b>\$</b>	<b>80,275,000</b>
<b>Funding Uses</b>												
Battlefield Park Renovation	\$	-	\$	-	\$	-	\$	-	\$	15,600,000	\$	15,600,000
Beaverdam Renovation		-		-		-		11,400,000		-		11,400,000
Computer Replacement		1,300,000		1,550,000		1,637,000		1,670,000		1,520,000		7,677,000
Facilities Renovation		1,000,000		1,000,000		1,000,000		1,000,000		1,000,000		5,000,000
Henry Clay Renovation		-		-		-		-		14,600,000		14,600,000
School Buses		1,000,000		2,040,000		2,065,000		2,780,000		3,113,000		10,998,000
Washington Henry Renovation		-		-		-		15,000,000		-		15,000,000
<b>Total Funding Uses</b>	<b>\$</b>	<b>3,300,000</b>	<b>\$</b>	<b>4,590,000</b>	<b>\$</b>	<b>4,702,000</b>	<b>\$</b>	<b>31,850,000</b>	<b>\$</b>	<b>35,833,000</b>	<b>\$</b>	<b>80,275,000</b>

The amounts reflected for fiscal years 2014-15 through 2017-18 are estimated. Funding estimates for these projects will be updated in the adopted budget after revised funding estimates are received from the County.

# HANOVER COUNTY PUBLIC SCHOOLS

## FY 2013-14 Operating Budget Capital Improvement Plan

**PROJECT:** Computer Replacement

**LOCATION:** All Schools

**DESCRIPTION/  
JUSTIFICATION:** This request provides for a phased replacement of computer units at various facilities. Provisions made for Specialty Center equipment replacement cycle.

**TIMETABLE:** Annual purchase of computers and related hardware

**PRIOR YEAR ALLOCATION:** Ongoing project

**FINANCIAL**

**OPERATING IMPACT:**

FY14	FY15	FY16	FY17	FY18	Total Impact
-	-	-	-	-	-

**NON-FINANCIAL  
OPERATING IMPACT:**

Maintaining an annual replacement cycle for computers allows the district to provide the proper technology to enhance the education of our students.

	FY14	FY15	FY16	FY17	FY18	Totals
<b>Funding Sources</b>						
County Transfer	\$ 1,300,000	\$ 1,550,000	\$ 1,637,000	\$ 1,670,000	\$ 1,520,000	\$ 7,677,000
<b>Total Funding Sources</b>	<b>\$ 1,300,000</b>	<b>\$ 1,550,000</b>	<b>\$ 1,637,000</b>	<b>\$ 1,670,000</b>	<b>\$ 1,520,000</b>	<b>\$ 7,677,000</b>
<b>Funding Uses</b>						
Equipment	\$ 1,300,000	\$ 1,550,000	\$ 1,637,000	\$ 1,670,000	\$ 1,520,000	\$ 7,677,000
<b>Total Funding Uses</b>	<b>\$ 1,300,000</b>	<b>\$ 1,550,000</b>	<b>\$ 1,637,000</b>	<b>\$ 1,670,000</b>	<b>\$ 1,520,000</b>	<b>\$ 7,677,000</b>

# Hanover County Public Schools

## ***APPENDIX 2***

*Educational Technology  
Long Range Plan  
2007-2013*

*Division Acceptable Use Policy*

## **POLICY 6-3.15      TECHNOLOGY PROGRAM**

### **HAN (Hanover Academic Network)**

The responsible use of computers and computer networks is a powerful tool in support of the instructional program. Regulation 6-3.15 outlines acceptable and unacceptable use of the HAN, a wide area network linking the schools, administrative office, and the Internet. As used in this Policy and any accompanying regulations, HAN shall include but not be limited to, hardware, software, software data, communication lines and devices, terminals, printers, CD-ROM devices, tape drives, servers, main frames, and personal computers, the Internet and other internal or external networks.

The division superintendent or his designee shall establish regulations in the form of an Acceptable Use Policy for the School Board's approval, containing the appropriate uses, ethics and protocol for the computer system. This policy shall include:

1. a prohibition against use by division employees and students of the Division's computer equipment and communications services for sending, receiving, viewing or downloading inappropriate and/or illegal material via the Internet and World Wide Web;
2. Provisions for the selection and operation of technology protection measures for the Division's computers having Internet access through such computers, which protects against access through such computers to –
  - a. child pornography, as set out in Virginia Code § 18.2-374.1:1 or as defined in 18 U.S.C. § 2256;
  - b. obscenity, as defined in Virginia Code § 18.2-372 or 18 U.S.C. § 1460;
  - c. material that Hanover County Public Schools deems to be harmful to juveniles, as defined in Virginia Code § 18.2-390, material that is harmful to minors, as defined in 47 U.S.C. § 254(h)(7)(G), and material that is otherwise inappropriate for minors;
3. provision establishing that the technology protection measure is enforced during any use of the Division's computers by minors;
4. a provision establishing that the online activities of minors will be monitored;
5. a provision designed to protect the safety and security of minors when using electronic mail, chat rooms, and other forms of direct electronic communications;
6. a prohibition against unauthorized access, including "hacking" and other unlawful activities, by minors online;
7. provision for a internet safety component that is integrated into the division's instructional program as set out in Virginia Code § 22.1-70.2;
8. a prohibition against the unauthorized disclosure, use, and continued dissemination of personal identification information regarding minors.

The failure of any student, teacher or administrator to follow the terms of this policy, the accompanying regulation, including the Acceptable Use Policy, may result in the loss of HAN privileges, disciplinary action and/or appropriate legal action.

### **Liability**

The School Board makes no warranties for the computer system it provides. The School Board shall not be responsible for any damages to the user from use of the computer system including loss of data, non-delivery or missed delivery of information, or service interruptions. The school division shall not be responsible for the accuracy or quality of information obtained through the computer system. The user agrees to indemnify the School Board for any losses, costs or damages incurred by the School Board relating to or arising out of any violation of this policy of the accompanying regulation(s).

### **Website Privacy**

The following information explains the Internet Privacy Policy which the Hanover County School Board has adopted for its website (web pages at addresses beginning with "http://www.hanover.k12.va.us"). The following is intended to explain the School Board's current Internet privacy practices, but shall not be construed as a contractual promise. The School Board reserves the right to amend its Internet Privacy Policy Statement at any time without notice.

## **Legal Requirements**

The School Board protects its records in accordance with its obligations as defined by applicable Virginia statutes, including, but not limited to, the "Virginia Privacy Protection Act of 1976", the "Virginia Freedom of Information Act", and by applicable federal laws.

## **Links to Other Websites**

The Hanover County School Board website may contain links to other public or private entities' websites, whose privacy practices the School Board does not control.

## **Information We Collect**

When you access the Hanover County School Board website, the routing or client information, and the essential and nonessential technical information listed below, is automatically collected. No other information is collected through the School Board website except when you deliberately decide to send it to the School Board website (for example, by clicking on a link to send the School Board an email). The information you might choose to send the School Board is listed below as "optional information."

*Routing, or client, information:* the Internet domain and Internet address of the computer you are using.

*Essential technical information:* identification of the page or service you are requesting, type of browser and operating system you are using, and the date and time of access.

*Nonessential technical information:* the Internet address of the website from which you linked directly to the School Board website.

*Optional information:* when you send the School Board an e-mail, your name, e-mail address, and the content of your e-mail; when you fill out online forms, all the data you choose to fill in or confirm.

*Cookies:* The Hanover County School Board website does not place any "cookies" on your computer.

## **How the Collected Information is used**

Routing information is used to route the requested web page to your computer for viewing. The School Board sends the requested web page and the routing information to the School Board Internet service provider or other entities involved in transmitting the requested page to you. The School Board does not control the privacy practices of those entities. Essential and nonessential technical information helps the School Board respond to your request in an appropriate format and helps the School Board plan website improvements.

Optional information enables the School Board to provide services or information tailored more specifically to your needs or to forward your message or inquiry to another entity that is better able to do so, and also allow the School Board to plan website improvements.

The School Board may keep its information indefinitely, but ordinarily deletes the transaction routing information from its computer within 60 days after the web page is transmitted and does not try to obtain any information to link it to the individuals who browse the website. However, on rare occasions when a "hacker" attempts to breach computer security, logs of routing information are retained to permit a security investigation and in such cases may be forwarded together with any other relevant information in the School Board's possession to law enforcement agencies. The School Board uses this transaction routing information primarily in a statistical summary type format to assess site content and server performance.

Optional information is retained in accordance with the records retention schedules at the Library of Virginia.

Under the "Virginia Freedom of Information Act", any records in the School Board's possession at the time of a "Freedom of Information Request" might be subject to inspection by, or disclosure to, members of the public. However, all identifiable confidential/personal information will be removed prior to releasing the routing information.

## Choice to Provide Information

There is no legal requirement for you to provide any information at the Hanover County School Board website. However, the website will not work without routing information and the essential technical information. Failure of your browser to provide nonessential technical information will not prevent your use of the website, but may prevent certain features from working. Failure to provide optional information will mean that the particular feature or service associated with that part of the web page will not be available to you.

## Customer Comments or Review

If you have questions about this privacy statement or the practices of this website, or if you choose to review or correct any information you previously submitted, please contact the School Board administration at [www.hanover.k12.va.us](http://www.hanover.k12.va.us).

**LEGAL REFERENCE:** Code of Virginia, 1950, as amended, §§ 18.2-372, 18.2-374.1:1, 18.2-390, 22.1-70.2, 2.1-380, 22.1-70.2; 18 U.S.C. §§ 1460, 2256; 47 U.S.C. § 254

*Recodified: August 2000*

*Amended: April 23, 2001, October 9, 2001*

*Amended: May 14, 2007*

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## ACCOMPANYING REGULATIONS

REGULATION 6-3.15(A) HAN - ACCEPTABLE USE POLICY

**REGULATION 6-3.15(B) REGULATIONS FOR STUDENTS ENROLLED IN ON-LINE INSTRUCTION**

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### REGULATION 6-3.15(A) HAN - ACCEPTABLE USE POLICY

This regulation governs the use of the Hanover Academic Network (HAN). In support of the Hanover County Public Schools' educational mission, Internet access will provide connections to worldwide resources and will facilitate local, regional, and worldwide communications.

#### Acceptable Use

1. The HAN is established solely for educational purposes and other legitimate Hanover County Public Schools business.
2. The HAN is a shared resource that will fulfill its mission only when used appropriately.
3. Each HAN account owner is responsible for all activities under his account. The School Board is not responsible for any unauthorized charges or fees resulting from access to the HAN.
4. Any HAN user's traffic which traverses another network may be subject to that network's acceptable use policy.
5. Approved photographs of students may be included in World Wide Web documents provided no identifying personal information is included. The unauthorized disclosure, use and dissemination of any personal identification information regarding students is prohibited.

#### Unacceptable Use

1. The HAN is not a public forum.
2. Any use of the HAN that is in violation of the Hanover County Public Schools Code of Conduct is prohibited.
3. Any use of the HAN for commercial purposes or for political lobbying is prohibited.
4. Any use of the HAN for illegal, inappropriate, or sexually explicit materials/activities, or in support of such activities, is prohibited. Illegal activities shall be defined as a violation of local, state, or federal laws. Inappropriate use shall be defined as a violation of the intended use of the network, including the intentional introduction of viruses, and the corruption of systems, files, and resources. The term "sexually explicit" shall include obscene, pornographic, of a sexual nature and not age appropriate material. Sexually explicit material will be determined by the staff of each school based on acceptable community standards.

5. Any use of the HAN for purposes in conflict with approved School Board policies and procedures is prohibited. (School Board Policy prohibits the illegal copying of documents, software, and other materials.)
6. Unauthorized downloading of software.
7. Wastefully using resources, such as file space.
8. Posting material authorized or created by another without his consent.

### **Violations**

HAN Users shall have no expectation of privacy in their accounts. The network is solely the property of the School Board. The School Board retains the right to audit, inspect, and/or monitor the user's internet/intranet access at any time. The online activities of students will be internet access through such computers to child pornography, obscenity or material that is harmful to or otherwise inappropriate for minors. This technology protection measure will be enforced during any student's use of the HAN. HAN users who violate any provisions of this Acceptable Use Policy shall be subject to discipline including loss of HAN privileges, appropriate discipline under the Student Code of Conduct, and termination of employment, and appropriate legal action; however, all students, educators, and parents have the responsibility to contact the school administrator as they become aware of unacceptable usage.

**Periodically**, Hanover County Public Schools will make decisions on whether specific uses of the HAN are consistent with this Policy. The Hanover County Public Schools shall remain the final authority on use of the network and the issuance of user accounts.

### **Guidelines for HAN Access and Accounts**

1. 1. Access to the HAN is considered a privilege and is permitted to the extent that resources are available.
2. 2. All Hanover County Public School personnel are eligible for a HAN account.
3. 3. Students in grades 6-12 will have access to the HAN through a classroom account managed by school personnel. Each student may also be granted an individual email account held jointly by the student and parent/guardian.

*Amended: October 9, 2001*

*Amended: May 14, 2007*

# Hanover County Public Schools

## ***APPENDIX 3***

*Educational Technology Long Range Plan  
2013-2019*

*Summary of Internet Safety Programs*

Hanover's internet safety resources are located online at <http://hcpstraining.org/isafe/> and are organized into the following categories: Elementary, Secondary, Parents, and Educators. The purpose of the site is to provide information and resources to assist students, parents, and educators in understanding the importance of being safe on the internet. Hanover is using iSafe™, Netsmartz™, Cybersmart™, Commonsense Media™, and Simple K12™ internet curriculum resources. Some of the materials are password protected due to copyright requirements. These materials can be accessed through Hanover's Blackboard content management system. Blackboard is used as a vehicle for integrating internet safety into the curriculum and for educator training.

The elementary curriculum is interactive. Videos and activities were developed for each grade level which includes integration into the core curriculum and use of available software programs. The elementary materials are located on the district's website. ITRTs, librarians, and teachers integrate the lessons into the curriculum where it is appropriate.

The secondary curriculum includes videos, suggested activities and reflection surveys in Blackboard. The videos have been delivered through public service announcements at each middle and high school. The teachers provide follow up discussion within the core content classes and are provided with supplementary lesson activities. Teachers integrate materials within their curriculum where it is appropriate to their lessons.

The parent link provides resources for parents that support Hanover's Internet Safety program. Presentations are also given at PTA meetings at the schools and at community meetings. The Internet Safety program is aligned with Hanover's initiative with our crisis and safety planning and will provide support to all schools in effectively communicating this information to the community.

Since 2008, Hanover educators and administrators have been provided with an online internet safety course in Blackboard consisting of seven modules: iSafe certification, personal safety, internet citizenship, cyber bullying, intellectual property, predator identification and homeland security. Upon successful completion of the course, educators receive recertification points. Educators are encouraged to submit their own lesson plans that integrate Internet safety into the curriculum to create a bank of lessons to share across the division.

The division offers a blended course for teachers and administrators titled Internet Safety and Ethics for Educators. The online component of the course is offered through Blackboard and is administered by the division's instructional technology resource teachers. The course consists of one face-to-face session and five online modules including personal safety, internet citizenship/ethics, cyber bullying/sexting, social networking/online predators, and internet security. Upon successful completion of the course, educators receive recertification points. The course is offered once each semester and during the summer.

The Family Life educators have worked with the ITRTs to coordinate the material that is covered within the family life curriculum and is also relevant to internet safety instruction. This collaboration and communication has been extremely helpful in ensuring that relevant content is covered in grades four through eleven. The guidance counselors integrate the OLWEUS bullying prevention program which includes cyber bullying prevention. There are plans to work with the CTE director to integrate internet safety lessons that are relevant to the CTE computer curriculum to reach as many students as possible in the secondary schools. Hanover engaged in the the FBI-SOS internet safety and cyber citizenship program for third through eighth grade students throughout the division.

# Hanover County Public Schools

## ***APPENDIX 4***

*Educational Technology Long Range Plan  
2013-2019*

*Focus Group Results and Planning Documents*

## **Planning Meetings**

Early organizational meetings to discuss the formation of the plan were held on October 18, 2012, November 13, 2012, and December 12, 2012. This group consisted of the Director of Curriculum & Instruction, the Director of Technology Services, the Chief Academic Officer, and Karen Richardson, Facilitator.

All-day planning sessions of the Educational Technology Planning Group were held on January 16, 2013 and March 13, 2013. Online collaborative sessions took place during the months of January, February, and March 2013 via the group's blog/wiki site: <http://hcpstechlongrangeplan.pbworks.com/w/page/62136321/FrontPage>. Workgroup tools such as popplet were used during the planning and discussion phase.

Stakeholder focus group sessions took place throughout the month of February, 2013 and were conducted by Karen Richardson. The results of the meetings were summarized and are included in the following pages. Teacher sessions were conducted in November 2012 and January 2013, and student focus group studies were conducted in November 2012 during the Student Advisory Council meetings.

## **FOCUS GROUP OVERVIEW:**

Interviews were conducted during February, 2013 with various Focus Groups. These groups represented a broad cross section of stakeholders

The following Focus Groups were interviewed:

- Superintendent
- ITRT Group
- High School Principal Group
- Middle School Principal Group
- Elementary School Principal Group
- Elementary Parent Group
- Middle/Secondary Parent Group
- Teacher Group
- Student Group

Four main areas of concern emerged as part of the interview process:

- Due to lack of division-level funding for new initiatives, technology has been purchased and implemented using school-level funds in a somewhat piecemeal fashion leading to uneven access and skill development. School-based funding has led to disparities in access to technology.
- In order to ensure that students are learning technology skills, benchmarks for student skills should be set for grade levels. Expectations for all students need to be articulated across the division.
- Greater oversight is needed from the central office including the development of instructional policies for "Bring Your Own Device" implementation, purchasing guidelines and technical support.
- Ongoing professional development is needed for all professional staff. School-based professional development provided by the Instructional Technology Resources Teachers is needed to support teachers in their integration of technology. Teachers need greater access to technology in order to learn to use it effectively.

## **FOCUS GROUP COMPOSITION AND QUESTIONS:**

### Superintendent

*Interview*

### Parent Focus Group

Q: What is your child's experience with technology in the classroom?

*Session 1: HPI Council*

*Session 2: Family Life Community Involvement Committee*

### Principals Focus Group

Q: Describe your experiences observing teachers in integrating technology in the classroom?

*Session 1: Elementary School*

*Session 2: Middle School*

*Session 3: High School*

### Teacher Group (one representative from each school)

Q: Describe your experiences with working with teachers in integrating technology in the classroom?

### ITRT Group

Q: Describe your experiences with working with teachers in integrating technology in the classroom?

### Student Group (one representative from each school)\*

Q: Describe your experiences with technology in your classrooms?

Q: How well do you think the school is preparing you for the future?

Q: Can you give some examples of how you are being prepared for the future?

*\*Questions posed to students at the November 2012 Student Advisory council meeting  
Minutes and notes from meeting utilized by the Planning Group*

# ***APPENDIX 5***

*Educational Technology Long Range Plan  
2013-2019*

*National Educational Technology Standards*

### 1. Creativity and Innovation

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.

- a. Apply existing knowledge to generate new ideas, products, or processes
- b. Create original works as a means of personal or group expression
- c. Use models and simulations to explore complex systems and issues
- d. Identify trends and forecast possibilities

### 2. Communication and Collaboration

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

- a. Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media
- b. Communicate information and ideas effectively to multiple audiences using a variety of media and formats
- c. Develop cultural understanding and global awareness by engaging with learners of other cultures
- d. Contribute to project teams to produce original works or solve problems

### 3. Research and Information Fluency

Students apply digital tools to gather, evaluate, and use information.

- a. Plan strategies to guide inquiry
- b. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
- c. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks
- d. Process data and report results

### 4. Critical Thinking, Problem Solving, and Decision Making

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

- a. Identify and define authentic problems and significant questions for investigation
- b. Plan and manage activities to develop a solution or complete a project
- c. Collect and analyze data to identify solutions and/or make informed decisions
- d. Use multiple processes and diverse perspectives to explore alternative solutions





# Essential Conditions

Necessary conditions to effectively leverage technology for learning:

## Shared Vision

Proactive leadership in developing a shared vision for educational technology among all education stakeholders, including teachers and support staff, school and district administrators, teacher educators, students, parents, and the community

## Empowered Leaders

Stakeholders at every level empowered to be leaders in effecting change

## Implementation Planning

A systemic plan aligned with a shared vision for school effectiveness and student learning through the infusion of information and communication technology (ICT) and digital learning resources

## Consistent and Adequate Funding

Ongoing funding to support technology infrastructure, personnel, digital resources, and staff development

## Equitable Access

Robust and reliable access to current and emerging technologies and digital resources, with connectivity for all students, teachers, staff, and school leaders

## Skilled Personnel

Educators, support staff, and other leaders skilled in the selection and effective use of appropriate ICT resources

## Ongoing Professional Learning

Technology-related professional learning plans and opportunities with dedicated time to practice and share ideas

## Technical Support

Consistent and reliable assistance for maintaining, renewing, and using ICT and digital learning resources

## Curriculum Framework

Content standards and related digital curriculum resources that are aligned with and support digital age learning and work

## Student-Centered Learning

Planning, teaching, and assessment centered around the needs and abilities of students

## Assessment and Evaluation

Continuous assessment of teaching, learning, and leadership, and evaluation of the use of ICT and digital resources

## Engaged Communities

Partnerships and collaboration within communities to support and fund the use of ICT and digital learning resources

## Support Policies

Policies, financial plans, accountability measures, and incentive structures to support the use of ICT and other digital resources for learning and in district school operations

## Supportive External Context

Policies and initiatives at the national, regional, and local levels to support schools and teacher preparation programs in the effective implementation of technology for achieving curriculum and learning technology (ICT) standards

[iste.org/nets](http://iste.org/nets)

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Effective teachers model and apply the NETS-S as they design, implement, and assess learning experiences to engage students and improve learning; enrich professional practice; and provide positive models for students, colleagues, and the community. All teachers should meet the following standards and performance indicators.

### 1. Facilitate and Inspire Student Learning and Creativity

Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments.

- a. Promote, support, and model creative and innovative thinking and inventiveness
- b. Engage students in exploring real-world issues and solving authentic problems using digital tools and resources
- c. Promote student reflection using collaborative tools to reveal and clarify students' conceptual understanding and thinking, planning, and creative processes
- d. Model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments

### 2. Design and Develop Digital Age Learning Experiences and Assessments

Teachers design, develop, and evaluate authentic learning experiences and assessment incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the NETS-S.

- a. Design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity

- b. Develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress
- c. Customize and personalize learning activities to address students' diverse learning styles, working strategies, and abilities using digital tools and resources
- d. Provide students with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching

### 3. Model Digital Age Work and Learning

Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society.

- a. Demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations
- b. Collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation
- c. Communicate relevant information and ideas effectively to students, parents, and peers using a variety of digital age media and formats
- d. Model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

## 1. Visionary Leadership

Educational Administrators inspire and lead development and implementation of a shared vision for comprehensive integration of technology to promote excellence and support transformation throughout the organization.

- a. Inspire and facilitate among all stakeholders a shared vision of purposeful change that maximizes use of digital-age resources to meet and exceed learning goals, support effective instructional practice, and maximize performance of district and school leaders
- b. Engage in an ongoing process to develop, implement, and communicate technology-infused strategic plans aligned with a shared vision
- c. Advocate on local, state and national levels for policies, programs, and funding to support implementation of a technology-infused vision and strategic plan

## 2. Digital Age Learning Culture

Educational Administrators create, promote, and sustain a dynamic, digital-age learning culture that provides a rigorous, relevant, and engaging education for all students.

- a. Ensure instructional innovation focused on continuous improvement of digital-age learning
- b. Model and promote the frequent and effective use of technology for learning
- c. Provide learner-centered environments equipped with technology and learning resources to meet the individual, diverse needs of all learners
- d. Ensure effective practice in the study of technology and its infusion across the curriculum
- e. Promote and participate in local, national, and global learning communities that stimulate innovation, creativity, and digital age collaboration

## 3. Excellence in Professional Practice

Educational Administrators promote an environment of professional learning and innovation that empowers educators to enhance student learning through the infusion of contemporary technologies and digital resources.

- a. Allocate time, resources, and access to ensure ongoing professional growth in technology fluency and integration
- b. Facilitate and participate in learning communities that stimulate, nurture and support administrators, faculty, and staff in the study and use of technology
- c. Promote and model effective communication and collaboration among stakeholders using digital age tools
- d. Stay abreast of educational research and emerging trends regarding effective use of technology and encourage evaluation of new technologies for their potential to improve student learning





## 1. Knowledge of Content

Computer Science Educators demonstrate knowledge of Computer Science content and model important principles and concepts.

- a. Demonstrate knowledge of and proficiency in data representation and abstraction
  - i. Effectively use primitive data types
  - ii. Demonstrate an understanding of static and dynamic data structures
  - iii. Effectively use, manipulate, and explain various external data stores: various types (text, images, sound, etc.), various locations (local, server, cloud), etc.
  - iv. Effectively use modeling and simulation to solve real-world problems
- b. Effectively design, develop, and test algorithms.
  - i. Using a modern, high-level programming language, construct correctly functioning programs involving simple and structured data types; compound boolean expressions; and sequential, conditional, and iterative control structures
  - ii. Design and test algorithms and programming solutions to problems in different contexts (textual, numeric, graphic, etc.) using advanced data structures
  - iii. Analyze algorithms by considering complexity, efficiency, aesthetics, and correctness.
  - iv. Demonstrate knowledge of two or more programming paradigms
  - v. Effectively use two or more development environments
  - vi. Demonstrate knowledge of varied software development models and project management strategies
- c. Demonstrate knowledge of digital devices, systems, and networks
  - i. Demonstrate an understanding of data representation at the machine level
  - ii. Demonstrate an understanding of machine-level components and related issues of complexity
  - iii. Demonstrate an understanding of operating systems and networking in a structured computer system
  - iv. Demonstrate an understanding of the operation of computer networks and mobile computing devices
- d. Demonstrate an understanding of the role computer science plays and its impact in the modern world
  - i. Demonstrate an understanding of the social, ethical, and legal issues and impacts of computing, and attendant responsibilities of computer scientists and users
  - ii. Analyze the contributions of computer science to current and future innovations in sciences, humanities, the arts, and commerce

