

# **ACPS Technology Plan 2011-2014**



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# 1 Executive Summary

The 2011-2014 Technology Plan builds upon the significant accomplishments of previous plans and infrastructure upgrades. This detailed plan differs from the previous plan because it sharpens the focus on the application of technology for learning in addition to transforming ACPS to be a data-driven organization. Student learning is transformed when the school community uses appropriate technology tools and resources to meet instructional goals and learning needs of the 21st Century. Technology that is seamless, reliable and easy to use is an integral part of a rich learning environment. In the past, technology was considered in isolation, but now it is an integral part of ACPS curriculum and practices.

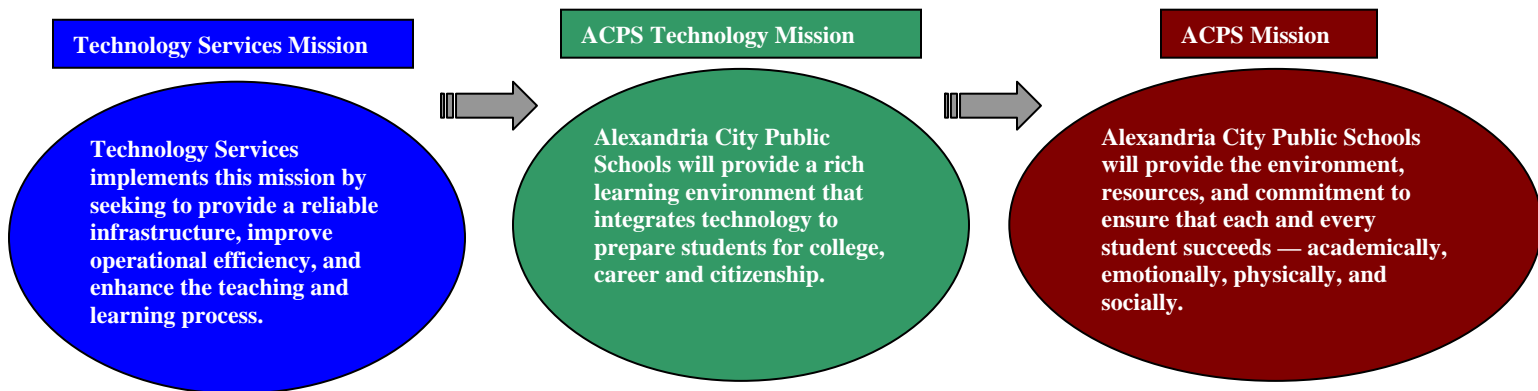
As technology is implemented within the classroom, ACPS is also implementing capacity building initiatives to facilitate data-driven decision making (3DM) by teachers, principals, and administrators. These 3DM initiatives will enhance the technology connectivity and enable students and parents to more effectively access student academic progress, school data, and academic resources. This classroom and organizational technology approach will put essential technology and data in the hands of those that can affect student achievement and implement the mission of ACPS “to provide the environment, resources, and commitment to ensure that each and every student succeeds – academically, emotionally, physically, and socially”.



## 2 Process

### 2.1 Summary of connections to division's mission and vision

Student learning is transformed when the school community uses appropriate technology tools and resources to meet instructional goals and learning needs of the 21st Century. Technology that is seamless, reliable and easy to use is an integral part of a rich learning environment. Technology cannot be considered in isolation. It is an integral part of ACPS curriculum and practices.



The ACPS Technology Services department leads and manages the implementation of a technology plan by aligning the Technology Goals to the Division Goals:

ACPS Strategic Goals	ACPS Technology Goals	Learning Environment - Provide students and instructional staff the technology resources to support a rich learning environment.	Professional Development- Provide all staff effective professional development that supports student learning.	Infrastructure- Provide a reliable infrastructure that facilitates the operation of the school division and is transparent to the end user.	Data- Provide access to high-quality data to support data-driven decision making.
1. Ensure all students demonstrate significant academic growth, and dramatically improve achievement outcomes for students below grade level.		X	X	X	X
2. Provide a rigorous, relevant, and internationally benchmarked education to enable all students to succeed as citizens in the global community.		X		X	X
3. Create an exceptional learning environment.		X		X	
4. Implement a focused, transparent governance model which incorporates effective communication and evidence-based decision making.			X	X	X
5. Provide clean, safe and conducive learning environments that utilize best practices for energy efficiency and environmental sustainability.		X		X	



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## **Technology Goal I: Learning Environment**

**Provide students and instructional staff the technology resources to support a rich learning environment**

Characteristics of a rich learning environment include the following:

- Collaboration to increase and improve student to student, student to teacher, teacher to teacher and school to community communications
- Engagement of students in the learning process
- Equitable access to the appropriate tools for students and instructional staff
- Relevant assignments that address global issues
- Authentic use of real world data to solve real world problems
- Utilization of a variety of instructional strategies and resources that meet the needs for all students.

### **Snapshot of Learning Environment:**

William is a sophomore student and is somewhat shy and not one to regularly volunteer in class. In addition, he has a pottery business that he has been developing outside of school. His business is growing, as well as his client base and time commitments outside of the school day. He is a good student and grasps concepts quickly yet his grades are not always as high as they could be because he rarely volunteers in class and his participation grade suffers. William learned about the online learning opportunities that his school was offering and approached his counselor about signing up for one. He took Trigonometry online starting in February and within 1 1/2 months had completed the course with an A. When he finished the Trigonometry course he started taking Pre-Calculus. By the end of May he was almost finished with Pre-Calculus and was also earning an A. He was able to complete two .5 semester courses within one semester and approached his counselor about the possibility of taking Chinese online the following year.



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## **Technology Goal II: Professional Development**

**Provide all staff effective professional development that supports student learning.**

Characteristics of effective professional development include the following:

- A focus on what students learn
- An analysis of the difference between current and desired student performance
- Teacher involvement in identifying what they need to learn and developing the learning experiences in which they will participate
- A design that is school-based and built into the day-to-day work of teaching
- Organization based on collaborative problem solving
- Continuous and ongoing learning, involving follow-up and support
- Opportunities for research, practice and reflection
- A connection to a comprehensive change process focused on improving student learning

### **Snapshot of Professional Development:**

Ms Jones, a seventh grade science teacher, has been a middle school teacher in ACPS for four years. She came to ACPS from Ohio and therefore, in her first year, had to take the TIE (Technology Integration Education) program, which is required by the State of Virginia. Ms Jones decided to take the blended version, doing some of her work on-line and some in face-to-face classes.

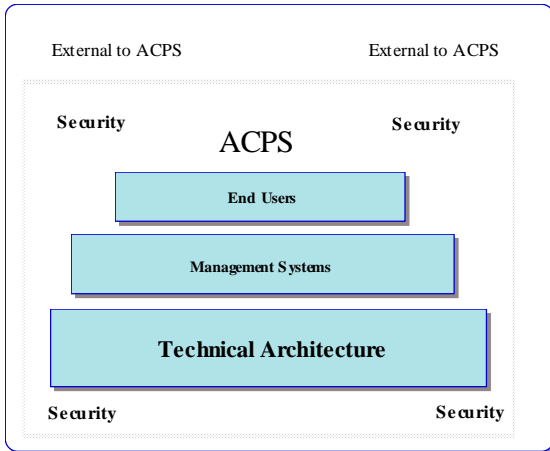
The next year a good friend, a high school science teacher, participated in Classroom 21. Her friend learned many interesting technology integration ideas in a collaborative environment involving a number of high school teachers. Ms Jones really liked the ideas her friend was sharing with her, so she applied for the middle school Teacher Leadership Project (TLP). In that program she spent a year studying, experimenting, and collaborating on technology integration ideas. Meeting face-to-face once a month and using Blackboard, she learned many new and exciting ways to use technology in her daily classroom instruction.

The following year, Ms Jones decided to challenge her technology instruction skills by participating in the NETS\*T (National Educational Technology Standards for Teachers) certification program. Meeting once a month, and using Blackboard, the group, from grades K-12, explores twenty rubrics dealing with educational technology. She is very excited about the changes in her classroom instruction that have happened to her through her participation in TIE, TLP, and NETS\*T.



### Technology Goal III: Infrastructure

Provide a reliable infrastructure that facilitates the operation of the school division and is transparent to the end user.



Infrastructure addresses the following components:

- Technical architecture includes computing and communication equipment
- Management systems include applications for accounting, payroll, Human Resources, purchasing, student data, transportation, maintenance, special education, child nutrition, and student information.
- End users refers to all students and ACPS employees
- Security refers to hardware and software tools, policies, procedures and guidelines.
- ACPS communication refers to all forms of electronic communications.

#### **Snapshot for Infrastructure:**

Ms. James, a first year kindergarten teacher, applies for a position in ACPS using an on-line recruiting application. A Human Resources recruiter contacts her through email to arrange an interview. Since Ms. James is not located in the Northern Virginia region, her interview is held via teleconferencing software. After a successful interview with the Human Resources department and several interested principals, Ms. James is offered and later accepts a position with ACPS. After the Human Resources department completes applicant processing, Ms. James's information is submitted to the Technology Services department where all of her accounts are created, access to the division's instructional tools is granted, and her laptop is prepared. Ms. James is notified via email of all of the necessary account information and direction on the use of division tools. When Ms. James arrives at her assignment and meets her students for the first time, she has reviewed her class information in the student information system, created her lessons in blackboard, met with her teammates and communicated with the parents of her students. Since the infrastructure and available systems are reliable and seamless, Ms. James is able to focus on her classroom full of students and begin a new year with them.



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## Technology Goal IV: Data

Provide access to high quality data to support data-driven decision making.

Characteristics of a data-driven organization:

- A focus on facts rather than “gut feel”
- Uses data to identify and monitor trends
- A connection to a comprehensive change process focused on improving student learning and organizational performance

### Snapshot for Data:

Mr. Patrick, a Chief Financial Officer, and Ms. Wang, Executive Director, are determining budget priorities for the next fiscal year. They would like to increase investment in high-performing reading programs and eliminate low performing ones. Due to an integrated process and data environment, they were able to tie funding to a specific set of students that have been in these programs over the last 5 years. They review the trend assessment data for the students and are able to identify reading programs that have outperformed others. They decide to reallocate all reading program investments to the top 2 performing reading programs.

## 2.2 Summary of work of the planning committee and its benchmark

During 2008-2009 the departments of Instructional and Information Technology led a major revision of the ACPS Technology Plan. The ACPS Technology Plan 2008-2011 more clearly communicated the division’s vision of the use of technology for learning, and its strategic plan to ensure technology is an integral part of a rich learning environment that prepares students for college, career and citizenship. The leadership of both departments worked with a Community Technology Advisory Committee comprised of six citizens as well as teachers and administrators representing central office and building administrators, curriculum specialists and classroom teachers.

In 2010, Alexandria City Public Schools (ACPS) was the recipient of an “Enhancing Education Through Technology (EETT)” federal grant. Using this grant, ACPS began implementing a capacity building project to facilitate data-driven decision-making by teachers, principals, and administrators. During the spring of 2010, ACPS organized a 3DM steering group and developed a comprehensive needs assessment to determine “What needs to be in place to put meaningful data in the hands of those who can affect student achievement” and roadmap that detailed how to reach 3DM goals. The 3DM roadmap first focused on creating solutions that impacted teachers most significantly, with subsequent phases focused more on building 3DM capabilities for the organization as a whole. The 3DM steering group and later the 3DMGG manages and oversees the implementation of the roadmap.



Both of these strategic planning efforts were critical in the development of the overarching technology plan.

### **2.3 Summary of the evaluation process and planned updated cycle**

The tactics in the plan were designed to support the ACPS strategic goals and to remain constant over the period of the plan. In contrast, the actions, the executable details of the ACPS Technology Plan, are dynamic and need to be continually assessed and revised when necessary.

An effective evaluation process provides the opportunity to fine tune the strategic plan and make necessary corrections in response to changing circumstances. ACPS utilizes the following “Plan – Do – Study – Act” continuous improvement process.

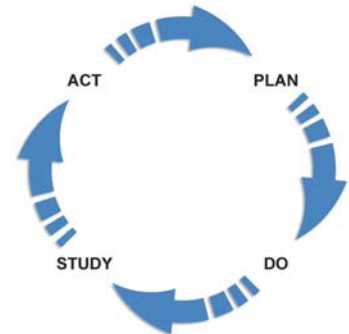
#### **Continuous Improvement**

**Plan** – Define the need for improvement and determine what the goal is for closing the gap.

**Do** – Define the approach to close the gap and engage staff and students in implementation.

**Study** – Gather data on the implementation and analyze.

**Act** – Determine how to improve the approach and implement changes in the new plan.



Data-Driven Decision Making Governance Group (3DMGG) was established to ensure that IT investment requests are well constructed and align with ACPS’ strategic goals, to review initiatives, to identify corrections that need revision, and to provide recommendations for improvement. The 3DMGG meets every 2 months. A subset of the 3DMGG is the Technology Leadership Group. This group meets regularly to monitor progress of the technology plan implementation and is also responsible for identifying and assessing new technologies and their implications for supporting a rich learning environment.

It is important for ACPS to gain feedback throughout the year to better support its stakeholders. In addition to the 3DM needs assessment, ACPS launched a division-wide strategic planning initiative to transform the organization to be more systems oriented and process-centric by establishing cross-functional working groups throughout the district to develop core processes and metrics. In January 2011, Technology Services initiated this planning process by forming a Technology Services Process Implementation Working Group and surveying ACPS with a comprehensive online questionnaire. The purpose of the online questionnaire was to seek ACPS employee feedback about the quality of services Technology Services provides and to provide valuable input to the working group regarding how to prioritize the key processes for improvement. Results will help target areas of improvement to be addressed throughout the year in addition to measuring current performance and planning for the future



## Tactics

### Technology Goal I: Learning Environment

#### Aligns to Strategic Goal:

- 1) Ensure all students demonstrate significant academic growth, and dramatically improve achievement outcomes for students below grade level.
- 2) Provide a rigorous, relevant, and internationally benchmarked education to enable all students to succeed as citizens in the global community.
- 3) Create an exceptional learning environment.
- 5) Provide clean, safe and conducive learning environments that utilize best practices for energy efficiency and environmental sustainability.

Provide standardized tools and resources.

Implement promising practices that support a rich learning environment

Evaluate how technology is employed appropriately to support a rich learning environment.

Support community understanding of technology resources and practices and their impact on student learning.

### Technology Goal II: Professional Development

#### Aligns to Strategic Goal:

- 1) Ensure all students demonstrate significant academic growth, and dramatically improve achievement outcomes for students below grade level.
- 4) Implement a focused, transparent governance model which incorporates effective communication and evidence-based decision making.

Provide a variety of effective professional development options including workshops, webinars, podcasts, coaching and online instruction for instructional staff.

Maintain a program of instructional leadership that fosters effective use of technology in support of teaching and learning

Provide training for non-licensed personnel.

### Technology Goal III: Infrastructure

#### Aligns to Strategic Goal:

- 1) Ensure all students demonstrate significant academic growth, and dramatically improve achievement outcomes for students below grade level.
- 2) Provide a rigorous, relevant, and internationally benchmarked education to enable all students to succeed as citizens in the global community.
- 3) Create an exceptional learning environment.
- 4) Implement a focused, transparent governance model which incorporates effective communication and evidence-based decision making.
- 5) Provide clean, safe and conducive learning environments that utilize best practices for energy efficiency and environmental sustainability.

Build and maintain a technical architecture that provides a strong and scalable foundation in support of the goals of the division.

Provide efficient and effective support for all instructional and administrative technology resources for students and staff.

Ensure management systems operate effectively.

Monitor policies, procedures and technologies to ensure that computing resources are secure and recoverable.

Maintain office productivity software and systems for communication and collaboration throughout the division.

### Technology Goal IV: Data

#### Aligns to Strategic Goal:

- 1) Ensure all students demonstrate significant academic growth, and dramatically improve achievement outcomes for students below grade level.
- 2) Provide a rigorous, relevant, and internationally benchmarked education to enable all students to succeed as citizens in the global community.
- 4) Implement a focused, transparent governance model which incorporates effective communication and evidence-based decision making.

Implement governance structure to manage and monitor IT investments

Enhance and implement systems and analysis tools

Increase data accessibility and data quality



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## **2.4 Highlights - Summary of Key Successes during 2008-2011**

### **Goal 1: Learning Environment**

- Established and implemented student to computer ratios for middle school and elementary ratios
- Provided LCD and document cameras to elementary and middle schools
- Explored the following “interactive tools” and developed implementation plans for the following hardware and software
  - iPads
  - iTouches
  - Smart Suite software
  - DyKnow software
  - Airliners
- Developed an annual process of creating student and teacher software images
- Established summer intern program for TC Williams students and graduates
- Restructured ACPS technology offices to create one Technology Services Department, combining instructional technology and informational technology, thereby increasing communication and efficiencies
- Centralized and standardized orientation on essential resources for all staff.
- Supported Individualized Achievement Plans (IAP) through customizations in the student information system
- Established ACPS- Online Learning Program, offering students opportunities to take elective, core and remedial courses online. Between 2009-10 and 2010-11 school years, student enrollments grew from 35 to 199

### **Goal 2: Professional Learning**

- Established and supported the Professional Learning Center (PLC) at TC Williams High School
- Transitioned all K-12 teachers from SASI to STARBASE to STAR Express
- Transitioned all K-12 teachers from Blackboard version 7.3 to Blackboard version 9.1
- Ten teachers (9-12) participated in the Room 21Project, a Professional Learning Community focused on the integration of technology to increase sustained learning
- Trained all 6-12 teachers in use of the ACPS Academic Access (AAA) system enabling parents and students to access student grade information
- Revamped the Technology Integration Education (TIE) program for new teachers increasing each session’s enrollment cap from 25 to 35 and expanding the online component
- Thirty-four middle and fifty-five elementary teachers completed the year long Teacher Leadership Project (TLP), developing student centered technology applications over the past 3 years



- Twenty-five (K-5) teachers collaborated with the Curriculum and Instructional technology departments in the planning and delivery of a 21<sup>st</sup> Century Institute intended to infuse effective use of technology into the new curriculum
- Six ACPS teacher successfully completed the NETS-T training and have received certification
- Developed and delivered tiered SMART Suite training to K-8 teachers via school and division wide training sessions
- K-8 TIS' joined math and literacy coaches in development and implementation of the division coaching initiative

### **Goal 3: Infrastructure**

- Virtualized ACPS data center to use resources more effectively
- Increased speed of primary Internet connection to support increased access and web-based resources
- Installed wireless access in conference areas in Central Office
- Expanded wireless throughout each elementary school
- Configured student computers for off-site internet access
- Added VPN for employee remote connectivity
- Began using our helpdesk software to manage service level agreements
- Implemented an application layer firewall to enhance network monitoring
- Expanded backup capabilities and added off-site capabilities
- Deployed an enterprise class collaboration suite (email, calendar, etc)
- Began streaming and archiving School Board meetings to support electronic governance meetings
- Reorganized helpdesk staffing and revised processes to increase efficiency and improve productivity.
- Increased flexible staff to meet demand during peak periods
- Automated and increased communication with end users' regarding technical requests
- Implemented and upgraded new student information system

### **Goal 4: Data**

- Developed Data-Driven Decision Making (3DM) Needs Assessment to determine what needs to be in place to put meaningful data in the hands of those who can affect student achievement
- Established the 3DM Governance Group (3DMGG) to submit, review, and prioritize changes to ACPS organizational design, systems, and processes related to 3DM.
- Developed Standard Project Request Process to provide a common process for business process owners, administrators, teachers, and other school system stakeholders to submit projects which will be analyzed to see where they fit in the 3DM Roadmap and the ACPS Strategic Plan
- Conducted Registrar Enhancement Project to improve organizational readiness, professional development for Registrars and data entry processes



- Established Registrar User Group to meet monthly to enhance capabilities and increase communication
- Conducted re-registration project for 3rd, 6th, and 9th grade to increase student contact data quality
- Acquired and configured Assessment Management System to be used to implement and assess based on the revised ACPS curriculum.



### 3 Actions

#### Virginia Department of Education Goal 1 - Provide a safe, flexible, and effective learning environment for all students

VDOE Objectives	ACPS Technology Goal	Action	Progress Measures
Objective 1.1 - Deliver appropriate and challenging curricula through face-to-face, blended, and virtual learning environments.	TG1 T2.3 Increase participation in online learning opportunities to address diverse student and faculty needs.	<ol style="list-style-type: none"> <li>1. Identify policy and operational barriers to providing online learning options to students and assist in the development of district policy that will eliminate such barriers.</li> <li>2. Increase operational capacity to enable every ACPS high school student to enroll in at least one online course beginning with the 2012-13 school year.</li> <li>3. Identify and implement strategies to use online learning to serve at-risk students, enabling them to reach the goal of graduation.</li> <li>4. Build the capacity to have ACPS teachers trained in online instruction thus reducing the need to use online teachers from outside providers.</li> <li>5. Explore and create collaborative agreements with neighboring districts and programs to increase capacity and services of the online learning options provided.</li> <li>6. Expand online learning options to middle school.</li> <li>7. Explore the feasibility of creating a full-time online program option for ACPS students.</li> <li>8. Create and implement a marketing plan to spread awareness about online learning options provided by ACPS-OLP to students, parents, ACPS staff, and the community at-large.</li> <li>9. Continually assess the courses and services offered by ACPS-OLP to ensure alignment with student and district academic needs.</li> </ol>	Enrollment, student, teacher, parent feedback
Objective 1.1 - Deliver appropriate and challenging curricula through face-to-face, blended, and virtual learning environments.	TG1 T2.5 Establish Programs in which students facilitate the use of technology in the schools	<ol style="list-style-type: none"> <li>1. Develop senior experience program for HS seniors to intern with Technology Services</li> <li>2. Develop Technology Services Summer Internship program</li> <li>3. Develop school-based student programs (e.g. SWAT for elementary and GENYES for secondary)</li> </ol>	Feedback from SWAT and GENYES program participants



<b>VDOE Objectives</b>	<b>ACPS Technology Goal</b>	<b>Action</b>	<b>Progress Measures</b>
Objective 1.2 - Provide the technical and human infrastructure necessary to support real, blended, and virtual learning environments.	TG1 T1.1 Provide necessary hardware including laptops, workstations, presentation systems and interactive tools. development	<ol style="list-style-type: none"> <li>1. Maintain an updated inventory of hardware that will be supported by Technology Services.</li> <li>2. Maintain process to evaluate existing hardware standards and to review needs for additional instructional technology hardware purchases.</li> <li>3. Maintain a four year replenishment cycle that provides each middle school with mobile computer carts that support at least a 3:1 ratio of students to computers.</li> <li>4. Maintain a four year replenishment cycle that provides each elementary school with at least a 4:1 ratio of students to computers.</li> <li>5. Maintain a replenishment cycle that provides high school students with a 1:1 ratio.</li> <li>6. Maintain a four year replenishment cycle for career and technical secondary program areas.</li> <li>7. Maintain a four year replenishment cycle that provides a 1:1 laptop ratio for teachers.</li> <li>8. Maintain a four year replenishment cycle that provides a 1:1 ratio for administrators and non teaching staff.</li> <li>9. Maintain a standard for an lcd projector and document camera to be placed in all classrooms and other instructional settings where appropriate.</li> <li>10. Explore applications and benefits of interactive tools in classrooms.</li> </ol>	Inventory document Documentation of evaluation process Inventory reference Presentation system plan Feedback/results from the following groups:  -Teacher focus groups -NETS*T Participants -Teacher Leadership Project -Teacher Dream Fund Applications
Objective 1.2 - Provide the technical and human infrastructure necessary to support real, blended, and virtual learning environments.	TG1 T2.1 Identify and align resources and tools with ACPS curriculum	<ol style="list-style-type: none"> <li>1. Update existing resources vetted and supported by ACPS.</li> <li>2. Align existing resources (including assistive technology) with new ACPS curriculum</li> <li>3. Research additional tools and resources that address the characteristics of a rich learning environment.</li> </ol>	Detailed action plan 08-09
Objective 1.2 - Provide the technical and human infrastructure necessary to support real, blended, and virtual learning environments.	TG1 T2.2 Identify and evaluate innovative and promising practices using exemplars collected during instruction and professional	<ol style="list-style-type: none"> <li>1. Create a process (rubric, submission, review) to identify qualities of teacher/student work that demonstrates characteristics of rich learning environment.</li> <li>2. Collect exemplary teacher/student work samples.</li> <li>3. Provide access to collected samples through Blackboard.</li> </ol>	Detailed action plan 08-09



<b>VDOE Objectives</b>	<b>ACPS Technology Goal</b>	<b>Action</b>	<b>Progress Measures</b>
Objective 1.2 - Provide the technical and human infrastructure necessary to support real, blended, and virtual learning environments.	TG1 T2.3 Increase participation in online learning opportunities to address diverse student and faculty needs.	<ol style="list-style-type: none"> <li>1. Identify policy and operational barriers to providing online learning options to students and assist in the development of district policy that will eliminate such barriers.</li> <li>2. Increase operational capacity to enable every ACPS high school student to enroll in at least one online course beginning with the 2012-13 school year.</li> <li>3. Identify and implement strategies to use online learning to serve at-risk students, enabling them to reach the goal of graduation.</li> <li>4. Build the capacity to have ACPS teachers trained in online instruction thus reducing the need to use online teachers from outside providers.</li> <li>5. Explore and create collaborative agreements with neighboring districts and programs to increase capacity and services of the online learning options provided.</li> <li>6. Expand online learning options to middle school.</li> <li>7. Explore the feasibility of creating a full-time online program option for ACPS students.</li> <li>8. Create and implement a marketing plan to spread awareness about online learning options provided by ACPS-OLP to students, parents, ACPS staff, and the community at-large.</li> <li>9. Continually assess the courses and services offered by ACPS-OLP to ensure alignment with student and district academic needs.</li> </ol>	Enrollment, student, teacher, parent feedback
Objective 1.2 - Provide the technical and human infrastructure necessary to support real, blended, and virtual learning environments.	TG1 T2.4 Expand division and school based programs of digital citizenship and Internet safety.	<ol style="list-style-type: none"> <li>1. Incorporate Internet Safety lessons into the Character Counts program in the elementary schools.</li> <li>2. Broadcast Public Service Announcements on Internet Safety on school programs and the ACPS community cable channel.</li> <li>3. Partner with NetSmartz and Wired Safety to provide current resources.</li> <li>4. Form an action research group to explore issues around Digital Citizenship.</li> <li>5. Incorporate Internet Safety training into peer mediation program expectations.</li> <li>6. Integrate Internet Safety into annual school plans and their instructional program.</li> <li>7. Organize student clubs that support use of technology in schools.</li> </ol>	Updated curriculum lessons Broadcast frequency Membership on advisory council/ committees Recommendations from research group Student-oriented training program School Plan
Objective 1.2 - Provide the technical and human infrastructure necessary to support real, blended, and virtual learning environments.	TG1 T2.5 Establish Programs in which students facilitate the use of technology in the schools	<ol style="list-style-type: none"> <li>1. Develop senior experience program for HS seniors to intern with Technology Services</li> <li>2. Develop Technology Services Summer Internship program</li> <li>3. Develop school-based student programs (e.g. SWAT for elementary and GENYES for secondary)</li> </ol>	Feedback from SWAT and GENYES program participants



VDOE Objectives	ACPS Technology Goal	Action	Progress Measures
Objective 1.2 - Provide the technical and human infrastructure necessary to support real, blended, and virtual learning environments.	TG3 T1.1 Maintain and update ACPS physical infrastructure (computer rooms, electrical plant and environmental systems) to keep pace with increasing demands.	<ol style="list-style-type: none"> <li>1. Create policies and procedures for the acceptable use of the ACPS technology facilities.</li> <li>2. Audit physical infrastructure to determine current and projected needs</li> <li>3. Maintain a replenishment cycle for upgrading network hardware at all schools, gradually increasing reliability and access</li> <li>4. Continue to consolidate, centralize and virtualize servers to reduce cost and improve manageability of server based systems.</li> <li>5. Create a network test lab for evaluation of new technology</li> </ol>	<p>Published acceptable use policy for technology facilities</p> <p>Report from audit</p> <p>Upgraded network hardware at schools</p> <p>Virtualized servers;</p> <p>Improved manageability; reduced cost</p> <p>Network test lab installed</p>
Objective 1.2 - Provide the technical and human infrastructure necessary to support real, blended, and virtual learning environments.	TG3 T1.2 Maintain Internet service that allows for appropriate speed and redundancy to meet the requirements for online learning, virtual classrooms, and high stakes testing.	<ol style="list-style-type: none"> <li>1. Add Additional Internet capacity by adding a second connection.</li> <li>2. Maintain speed of primary Internet access service to 100Mbs.</li> <li>3. Add a secondary Internet access service of 100Mbs.</li> </ol>	Operational link to the Internet
Objective 1.2 - Provide the technical and human infrastructure necessary to support real, blended, and virtual learning environments.	TG3 T1.3 Retro fit older wireless networks to increase speed and manageability	1. Maintain wireless connectivity throughout ACPS. Replace or upgrade as needed to maintain an operational level of connectivity for the students and staff	Wireless networking throughout schools
Objective 1.2 - Provide the technical and human infrastructure necessary to support real,	TG3 T1.4 Continue to provide off-site access to the ACPS network for students and staff.	<ol style="list-style-type: none"> <li>1. Continue providing dial-in service for all 9th through 12<sup>th</sup> grade students</li> <li>2. Manage filters on student devices configured for off-site Internet access</li> <li>3. Continue to expand availability of ACPS resources to off-site personnel via VPN and communication servers</li> </ol>	<p>Usage report</p> <p>Installation on student laptops;</p> <p>Increased number of staff with off-site access</p>



<b>VDOE Objectives</b>	<b>ACPS Technology Goal</b>	<b>Action</b>	<b>Progress Measures</b>
blended, and virtual learning environments.			
Objective 1.2 - Provide the technical and human infrastructure necessary to support real, blended, and virtual learning environments.	TG4 T1.1 Maintain Data-Driven Decision Making Governance Group	<ol style="list-style-type: none"> <li>1. Establish Project Charter indicating membership and roles and responsibilities</li> <li>2. Organize and discuss enterprise-wide issues and initiatives</li> </ol>	Coordinated and Signed Project Charter Meeting Schedule
Objective 1.2 - Provide the technical and human infrastructure necessary to support real, blended, and virtual learning environments.	TG4 T 1.2 Develop Standard Project Request Process	<ol style="list-style-type: none"> <li>1. Coordinate and implement standard IT project request and approval process</li> </ol>	Coordinated and approved Process
Objective 1.2 - Provide the technical and human infrastructure necessary to support real, blended, and virtual learning environments.	TG4 T3.1 Customize, monitor and maintain Student Information System	<ol style="list-style-type: none"> <li>1. Upgrade software with new builds</li> <li>2. Refine and update user roles to allow access to data</li> <li>3. Customize software to fit ACPS business model</li> <li>4. Communicate and train on new features</li> </ol>	Build schedule Survey
Objective 1.3 - Provide high-quality professional	TG2 T1.1 Increase proficiency among ACPS staff in using essential	<ol style="list-style-type: none"> <li>1. Provide mandated orientation days for newly hired staff dedicated to hands-on training.</li> <li>2. Revise practices for providing ongoing hands-on training for current employees.</li> <li>3. Provide all directions and training materials on Blackboard.</li> </ol>	Documentation, agenda and feedback of orientation days Identifiable plan of action



<b>VDOE Objectives</b>	<b>ACPS Technology Goal</b>	<b>Action</b>	<b>Progress Measures</b>
development to help educators create, maintain, and work in a variety of learner-centered environments	resources/systems (ie: student information system, email, online portal, network services).		Published directory of centrally located directions and training materials
Goal 1.3 - Provide high-quality professional development to help educators create, maintain, and work in a variety of learner-centered environments	TG2 T1.2 Increase embedded professional development opportunities for teachers within the school day.	<ol style="list-style-type: none"> <li>1. Create and implement school-wide professional development plan through the coordination of the TIS with building administrators. Integrate professional development opportunities with school-based professional development programs.</li> <li>2. Document school-based professional development offerings including individual, group, coaching, modeling and just-in-time training.</li> <li>3. Structure individualized technology integration classes that focuses on professional goals, reflections, authentic products and online alternatives to face-to-face instruction.</li> </ol>	<p>School wide professional development plan for all buildings</p> <p>Documentation of staff development offerings, including data on increased teacher usage and student products</p> <p>Documentation of individual school offerings that are aligned with stated actions, participant feedback, and instructor feedback</p>
Goal 1.3 - Provide high-quality professional development to help educators create, maintain, and work in a variety of learner-centered environments	TG2 T1.3 Maintain professional development opportunities for teachers that extend the learning environment.	<ol style="list-style-type: none"> <li>1. Participation of teacher cohorts in ongoing study and research such as Action Research and Teacher Leadership projects.</li> <li>2. Continue to evaluate and modify technology licensure program to not only include exposure to all ACPS resources and state requirements but also individualized professional goals, reflections, authentic products and online alternatives to face-to-face instruction.</li> <li>3. Connect teacher and staff with online courses and webinars provided by outside organizations such as North Tier and PBS.</li> </ol>	Documentation of staff development offerings, including data on increased teacher usage and student products
Goal 1.3 - Provide high-quality professional development to help educators create, maintain,	TG2 T1.4 Provide tiered learning opportunities for teachers in the area of instructional technology.	<ol style="list-style-type: none"> <li>1. Delineate multiple levels of application for instructional technology resources.</li> <li>2. Establish common goals and delivery methods for facilitators of professional development.</li> </ol>	<p>Published matrix</p> <p>Published facilitator's guide</p>



VDOE Objectives	ACPS Technology Goal	Action	Progress Measures
and work in a variety of learner-centered environments			
Goal 1.3 - Provide high-quality professional development to help educators create, maintain, and work in a variety of learner-centered environments	TG2 T2.1 Provide instructional leaders (administrators, directors, coaches, specialists) learning opportunities that identify effective practices.	<ol style="list-style-type: none"> <li>1. Foster collaboration among instructional coaches and Technology Integration Specialists (TIS) through common training and planning sessions</li> <li>2. Model use of instructional technology tools and resources in leadership meetings.</li> <li>3. Participate in site Technology Services sponsored by the National School Board Association.</li> <li>4. Pilot technology integration leadership project for administrators.</li> </ol>	Documentation of involvement with identified group Document use of instructional technology tools and resources in leadership meetings Documentation of attendance and team reflection Documentation of attendance Documentation of walk-throughs
Goal 1.3 - Provide high-quality professional development to help educators create, maintain, and work in a variety of learner-centered environments	TG2 T3.1 Increase proficiency among ACPS non-licensed staff in using essential resources/systems (ie: student information system, email, online portal, network services).	<ol style="list-style-type: none"> <li>1. Provide mandated orientation times for newly hired staff dedicated to hands-on training.</li> <li>2. Revise practices for providing ongoing hands-on training for current employees.</li> <li>3. Provide all directions and training materials on Blackboard.</li> </ol>	Documentation, agenda and feedback of orientation days Identifiable plan of action Published directory of centrally located directions and training materials
Goal 1.3 - Provide high-quality professional development to help educators create, maintain, and work in a variety of learner-centered	TG2 T3.2 Provide enhanced staff development for administrative, support and technical staff to ensure highest levels of competency.	<ol style="list-style-type: none"> <li>1. Provide extensive training of Technology Services trainers in both training technique, and in content, to enhance support of all administrative systems.</li> <li>2. Ensure that hardware technicians stay current on all equipment deployed in ACPS.</li> <li>3. Provide extensive, multi-level training in all office productivity software supported by ACPS.</li> <li>4. Ensure that all administrative system end users (new and current) are thoroughly trained in the use of their systems.</li> </ol>	Training schedules, rosters, completion certificates



<b>VDOE Objectives</b>	<b>ACPS Technology Goal</b>	<b>Action</b>	<b>Progress Measures</b>
environments			
Goal 1.3 - Provide high-quality professional development to help educators create, maintain, and work in a variety of learner-centered environments	TG2 T4.1 Use data to inform and guide professional development programs.	1. Use student assessment data (test scores, feedback and products) to determine needs for school wide and content specific professional development plans. 2. Use workshop evaluation data to determine needs for school wide and content specific professional development plans. 3. Use focus groups to provide feedback on professional development needs.	Annual revision of school wide and content specific professional development plans



**Virginia Department of Education Goal 2- Engage students in meaningful curricular content through the purposeful and effective use of technology.**

<b>VDOE Objectives</b>	<b>ACPS Technology Goal</b>	<b>Action</b>	<b>Progress Measures</b>
Objective 2.1 - Support innovative professional development practices that promote strategic growth for all educators and collaboration with other educators, content experts, and students.	TG1 T2.2 Identify and evaluate innovative and promising practices using exemplars collected during instruction and professional	<ol style="list-style-type: none"> <li>1. Create a process (rubric, submission, review) to identify qualities of teacher/student work that demonstrates characteristics of rich learning environment.</li> <li>2. Collect exemplary teacher/student work samples.</li> <li>3. Provide access to collected samples through Blackboard.</li> </ol>	Detailed action plan 08-09
Objective 2.1 - Support innovative professional development practices that promote strategic growth for all educators and collaboration with other educators, content experts, and students.	TG1 T2.3 Increase participation in online learning opportunities to address diverse student and faculty needs.	<ol style="list-style-type: none"> <li>1. Identify policy and operational barriers to providing online learning options to students and assist in the development of district policy that will eliminate such barriers.</li> <li>2. Increase operational capacity to enable every ACPS high school student to enroll in at least one online course beginning with the 2012-13 school year.</li> <li>3. Identify and implement strategies to use online learning to serve at-risk students, enabling them to reach the goal of graduation.</li> <li>4. Build the capacity to have ACPS teachers trained in online instruction thus reducing the need to use online teachers from outside providers.</li> <li>5. Explore and create collaborative agreements with neighboring districts and programs to increase capacity and services of the online learning options provided.</li> <li>6. Expand online learning options to middle school.</li> <li>7. Explore the feasibility of creating a full-time online program option for ACPS students.</li> <li>8. Create and implement a marketing plan to spread awareness about online learning options provided by ACPS-OLP to students, parents, ACPS staff, and the community at-large.</li> <li>9. Continually assess the courses and services offered by ACPS-OLP to ensure alignment with student and district academic needs.</li> </ol>	Enrollment, student, teacher, parent feedback
Objective 2.1 - Support innovative professional development	TG1 T2.5 Establish Programs in which students facilitate the use of technology in the schools	<ol style="list-style-type: none"> <li>1. Develop senior experience program for HS seniors to intern with Technology Services</li> <li>2. Develop Technology Services Summer Internship program</li> <li>3. Develop school-based student programs (e.g. SWAT for elementary and GENYES for secondary)</li> </ol>	Feedback from SWAT and GENYES program participants



VDOE Objectives	ACPS Technology Goal	Action	Progress Measures
practices that promote strategic growth for all educators and collaboration with other educators, content experts, and students.			
Objective 2.1 - Support innovative professional development practices that promote strategic growth for all educators and collaboration with other educators, content experts, and students.	TG2 T1.1 Increase proficiency among ACPS staff in using essential resources/systems (ie: student information system, email, online portal, network services).	<ol style="list-style-type: none"> <li>1. Provide mandated orientation days for newly hired staff dedicated to hands-on training.</li> <li>2. Revise practices for providing ongoing hands-on training for current employees.</li> <li>3. Provide all directions and training materials on Blackboard.</li> </ol>	Documentation, agenda and feedback of orientation days Identifiable plan of action Published directory of centrally located directions and training materials
Objective 2.1 - Support innovative professional development practices that promote strategic growth for all educators and collaboration with other educators, content experts, and students.	TG2 T1.2 Increase embedded professional development opportunities for teachers within the school day.	<ol style="list-style-type: none"> <li>1. Create and implement school-wide professional development plan through the coordination of the TIS with building administrators. Integrate professional development opportunities with school-based professional development programs.</li> <li>2. Document school-based professional development offerings including individual, group, coaching, modeling and just-in-time training.</li> <li>3. Structure individualized technology integration classes that focuses on professional goals, reflections, authentic products and online alternatives to face-to-face instruction.</li> </ol>	School wide professional development plan for all buildings Documentation of staff development offerings, including data on increased teacher usage and student products Documentation of individual school offerings that are aligned with stated actions, participant feedback, and instructor feedback



<b>VDOE Objectives</b>	<b>ACPS Technology Goal</b>	<b>Action</b>	<b>Progress Measures</b>
Objective 2.1 - Support innovative professional development practices that promote strategic growth for all educators and collaboration with other educators, content experts, and students.	TG2 T1.3 Maintain professional development opportunities for teachers that extend the learning environment	<ol style="list-style-type: none"> <li>1. Participation of teacher cohorts in ongoing study and research such as Action Research and Teacher Leadership projects.</li> <li>2. Continue to evaluate and modify technology licensure program to not only include exposure to all ACPS resources and state requirements but also individualized professional goals, reflections, authentic products and online alternatives to face-to-face instruction.</li> <li>3. Connect teacher and staff with online courses and webinars provided by outside organizations such as North Tier and PBS.</li> </ol>	Documentation of staff development offerings, including data on increased teacher usage and student products
Objective 2.1 - Support innovative professional development practices that promote strategic growth for all educators and collaboration with other educators, content experts, and students.	TG2 T1.4 Provide tiered learning opportunities for teachers in the area of instructional technology.	<ol style="list-style-type: none"> <li>1. Delineate multiple levels of application for instructional technology resources.</li> <li>2. Establish common goals and delivery methods for facilitators of professional development.</li> </ol>	Published matrix Published facilitator's guide
Objective 2.1 - Support innovative professional development practices that promote strategic growth for all educators and collaboration with other educators, content experts, and students.	TG2 T2.1 Provide instructional leaders (administrators, directors, coaches, specialists) learning opportunities that identify effective practices.	<ol style="list-style-type: none"> <li>1. Foster collaboration among instructional coaches and Technology Integration Specialists (TIS) through common training and planning sessions</li> <li>2. Model use of instructional technology tools and resources in leadership meetings.</li> <li>3. Participate in site Technology Services sponsored by the National School Board Association.</li> <li>4. Pilot technology integration leadership project for administrators.</li> </ol>	Documentation of involvement with identified group Document use of instructional technology tools and resources in leadership meetings Documentation of attendance and team reflection Documentation of attendance Documentation of walk-



VDOE Objectives	ACPS Technology Goal	Action	Progress Measures
			throughs
Objective 2.1 - Support innovative professional development practices that promote strategic growth for all educators and collaboration with other educators, content experts, and students.	TG2 T3.1 Increase proficiency among ACPS non-licensed staff in using essential resources/systems (ie: student information system, email, online portal, network services).	<ol style="list-style-type: none"> <li>1. Provide mandated orientation times for newly hired staff dedicated to hands-on training.</li> <li>2. Revise practices for providing ongoing hands-on training for current employees.</li> <li>3. Provide all directions and training materials on Blackboard.</li> </ol>	Documentation, agenda and feedback of orientation days Identifiable plan of action Published directory of centrally located directions and training materials
Objective 2.1 - Support innovative professional development practices that promote strategic growth for all educators and collaboration with other educators, content experts, and students.	TG2 T3.2 Provide enhanced staff development for administrative, support and technical staff to ensure highest levels of competency.	<ol style="list-style-type: none"> <li>1. Provide extensive training of Technology Services trainers in both training technique, and in content, to enhance support of all administrative systems.</li> </ol>	Training schedules, rosters, completion certificates
Objective 2.1 - Support innovative professional development practices that promote strategic growth for all educators and collaboration with	TG2 T4.1 Use data to inform and guide professional development programs.	<ol style="list-style-type: none"> <li>1. Use student assessment data (test scores, feedback and products) to determine needs for school wide and content specific professional development plans.</li> <li>2. Use workshop evaluation data to determine needs for school wide and content specific professional development plans.</li> <li>3. Use focus groups to provide feedback on professional development needs.</li> </ol>	Annual revision of school wide and content specific professional development plans



<b>VDOE Objectives</b>	<b>ACPS Technology Goal</b>	<b>Action</b>	<b>Progress Measures</b>
other educators, content experts, and students.			
Objective 2.2 - Actualize the ability of technology to individualize learning and provide equitable opportunities for all learners.	TG1 T2.1 Identify and align resources and tools with ACPS curriculum	<ol style="list-style-type: none"> <li>1. Update existing resources vetted and supported by ACPS.</li> <li>2. Align existing resources (including assistive technology) with new ACPS curriculum</li> <li>3. Research additional tools and resources that address the characteristics of a rich learning environment.</li> </ol>	Curriculum and Instruction, ACAT
Objective 2.2 - Actualize the ability of technology to individualize learning and provide equitable opportunities for all learners.	TG4 T3.2 Provide parents and families online access to student's grade, attendance, and schedule information	<ol style="list-style-type: none"> <li>1. Create account and provide access to secondary parents</li> </ol>	Number of parents accessing the system
Objective 2.3 - Facilitate the implementation of high-quality Internet safety programs in schools.	TG1 T2.4 Expand division and school based programs of digital citizenship and Internet safety.	<ol style="list-style-type: none"> <li>1. Incorporate Internet Safety lessons into the Character Counts program in the elementary schools.</li> <li>2. Broadcast Public Service Announcements on Internet Safety on school programs and the ACPS community cable channel.</li> <li>3. Partner with NetSmartz and Wired Safety to provide current resources.</li> <li>4. Form an action research group to explore issues around Digital Citizenship.</li> <li>5. Incorporate Internet Safety training into peer mediation program expectations.</li> <li>6. Integrate Internet Safety into annual school plans and their instructional program.</li> <li>7. Organize student clubs that support use of technology in schools.</li> </ol>	Updated curriculum lessons Broadcast frequency Membership on advisory council/ committees Recommendations from research group Student-oriented training program School Plan
Objective 2.3 - Facilitate the implementation of high-quality Internet safety	TG3 T4.1 Use security monitoring tools to help ensure reliability and availability of ACPS resources.	<ol style="list-style-type: none"> <li>1. Authenticate access to ACPS network</li> <li>2. Renew licenses for Internet content filtering, email content filtering and virus protection and Firewall</li> <li>3. Continue to use manual and automated content monitoring to evaluate effectiveness of security tool set</li> </ol>	Document procedures and deploy current and future technologies for security.



<b>VDOE Objectives</b>	<b>ACPS Technology Goal</b>	<b>Action</b>	<b>Progress Measures</b>
programs in schools.		4. Continually review security as a part of normal operation	
Objective 2.3 - Facilitate the implementation of high-quality Internet safety programs in schools.	TG3 T4.2 Maintain Acceptable Use Policies (AUP) with staff and students that includes an Internet Safety Component aligned with the Virginia Department of Education's <i>Guidelines and Resources for Internet Safety in Schools</i> document.	<ol style="list-style-type: none"><li>1. Continue to review, revise and publish an AUP</li><li>2. Post AUPs on school grounds and web-based systems</li><li>3. Communicate AUP updates to staff every August</li><li>4. Provide new employees with a thorough description of the AUP agreement</li><li>5. Review AUPs with students as part of the Internet Safety program.</li></ol>	Revised AUP, School Board approval, Posted AUPs, Documentation of communication, New teacher processing requirements, Internet Safety Program Plan



**Virginia Department of Education Goal 3 -Afford students with opportunities to apply technology effectively to gain knowledge, develop skills, and create and distribute artifacts that reflect their understandings.**

<b>VDOE Objectives</b>	<b>ACPS Technology Goal</b>	<b>Action</b>	<b>Progress Measures</b>
Objective 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.	TG1 T2.3 Increase participation in online learning opportunities to address diverse student and faculty needs.	<ol style="list-style-type: none"> <li>1. Identify policy and operational barriers to providing online learning options to students and assist in the development of district policy that will eliminate such barriers.</li> <li>2. Increase operational capacity to enable every ACPS high school student to enroll in at least one online course beginning with the 2012-13 school year.</li> <li>3. Identify and implement strategies to use online learning to serve at-risk students, enabling them to reach the goal of graduation.</li> <li>4. Build the capacity to have ACPS teachers trained in online instruction thus reducing the need to use online teachers from outside providers.</li> <li>5. Explore and create collaborative agreements with neighboring districts and programs to increase capacity and services of the online learning options provided.</li> <li>6. Expand online learning options to middle school.</li> <li>7. Explore the feasibility of creating a full-time online program option for ACPS students.</li> <li>8. Create and implement a marketing plan to spread awareness about online learning options provided by ACPS-OLP to students, parents, ACPS staff, and the community at-large.</li> <li>9. Continually assess the courses and services offered by ACPS-OLP to ensure alignment with student and district academic needs.</li> </ol>	Enrollment, student, teacher, parent feedback
Objective 3.1 - Provide and support professional development that increases the capacity of teachers to design and facilitate meaningful learning	TG1 T2.5 Establish Programs in which students facilitate the use of technology in the schools	<ol style="list-style-type: none"> <li>1. Develop senior experience program for HS seniors to intern with Technology Services</li> <li>2. Develop Technology Services Summer Internship program</li> <li>3. Develop school-based student programs (e.g. SWAT for elementary and GENYES for secondary)</li> </ol>	Feedback from SWAT and GENYES program participants



VDOE Objectives	ACPS Technology Goal	Action	Progress Measures
experiences, thereby encouraging students to create, problem solve, communicate, collaborate, and use real-world skills by applying technology purposefully.			
Objective 3.2 - Ensure that students, teachers, and administrators are ICT literate.	TG1 T3.1 Monitor and assess student mastery of Virginia's Computer Technology Standards of Learning (SOLs).	<ol style="list-style-type: none"> <li>1. Identify student work samples (output) that demonstrate mastery of Computer Technology SOLs (CT/SOLs) by grade level.</li> <li>2. Provide teachers tools (i.e. rubrics, checklists) to assess student mastery of CT/SOLs.</li> </ol>	Work sample portfolios organized by grade level Mastery checklist and portfolios
Objective 3.2 - Ensure that students, teachers, and administrators are ICT literate.	TG2 T2.1 Provide instructional leaders (administrators, directors, coaches, specialists) learning opportunities that identify effective practices.	<ol style="list-style-type: none"> <li>1. Foster collaboration among instructional coaches and Technology Integration Specialists (TIS) through common training and planning sessions</li> <li>2. Model use of instructional technology tools and resources in leadership meetings.</li> <li>3. Participate in site Technology Services sponsored by the National School Board Association.</li> <li>4. Pilot technology integration leadership project for administrators.</li> </ol>	Documentation of involvement with identified group Document use of instructional technology tools and resources in leadership meetings Documentation of attendance and team reflection Documentation of attendance Documentation of walk-throughs
Objective 3.2 - Ensure that students, teachers, and administrators are ICT literate.	TG2 T1.4 Provide tiered learning opportunities for teachers in the area of instructional technology.	<ol style="list-style-type: none"> <li>1. Delineate multiple levels of application for instructional technology resources.</li> <li>2. Establish common goals and delivery methods for facilitators of professional development.</li> </ol>	Published matrix Published facilitator's guide



<b>VDOE Objectives</b>	<b>ACPS Technology Goal</b>	<b>Action</b>	<b>Progress Measures</b>
Objective 3.3 - Implement technology-based formative assessments that produce further growth in content knowledge and skills development.	TG1 T1.2 Provide software including course management tools, curricular support, assessment systems and productivity	<ol style="list-style-type: none"> <li>1. Continue annual reviews of student and teacher images.</li> <li>2. Maintain annual process to update teacher computer with most recent image</li> </ol>	Review and feedback documentation Documentation of annual image versions
Objective 3.3 - Implement technology-based formative assessments that produce further growth in content knowledge and skills development.	TG1 T1.3 Provide online subscriptions including research databases and collaborative systems.	<ol style="list-style-type: none"> <li>1. Provide Blackboard as a content management and collaboration system.</li> <li>2. Provide content area resources through online subscriptions to ensure division-wide accessibility.</li> <li>3. Interface online subscriptions with Blackboard.</li> <li>4. Establish committee to meet annually to review needs, usage and requests for software and online subscriptions.</li> </ol>	Access provided to all staff and students Accessible and renewed subscriptions All subscriptions accessible through Blackboard Meeting agendas, schedules and reports
Objective 3.3 - Implement technology-based formative assessments that produce further growth in content knowledge and skills development.	TG4 T 3.3 Develop Assessment Management System	<ol style="list-style-type: none"> <li>1. Configure system to include ACPS curriculum</li> <li>2. Launch system pilot</li> <li>3. Provide training and outreach</li> </ol>	Percentage of curriculum incorporated in the system Survey



**Virginia Department of Education 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.**

VDOE Objectives	ACPS Technology Goal	Action	Progress Measures
Goal 4.1 Provide resources and support to ensure that every student has access to a personal Computing device.	TG1 T1.1 Provide necessary hardware including laptops, workstations, presentation systems and interactive tools.	<ol style="list-style-type: none"> <li>1. Maintain an updated inventory of hardware that will be supported by Technology Services.</li> <li>2. Maintain process to evaluate existing hardware standards and to review needs for additional instructional technology hardware purchases.</li> <li>3. Maintain a four year replenishment cycle that provides each middle school with mobile computer carts that support at least a 3:1 ratio of students to computers.</li> <li>4. Maintain a four year replenishment cycle that provides each elementary school with at least a 4:1 ratio of students to computers.</li> </ol>	Inventory document Documentation of evaluation process Inventory reference
Goal 4.1 Provide resources and support to ensure that every student has access to a personal computing device.	TG1 T2.1 Identify and align resources and tools with ACPS curriculum	<ol style="list-style-type: none"> <li>1. Update existing resources vetted and supported by ACPS.</li> <li>2. Align existing resources (including assistive technology) with new ACPS curriculum</li> <li>3. Research additional tools and resources that address the characteristics of a rich learning environment.</li> </ol>	Detailed action plan 08-09
Goal 4.1 Provide resources and support to ensure that every student has access to a personal computing device.	TG3 T1.1 Maintain and update ACPS physical infrastructure (computer rooms, electrical plant and environmental systems) to keep pace with increasing demands.	<ol style="list-style-type: none"> <li>1. Create policies and procedures for the acceptable use of the ACPS technology facilities.</li> <li>2. Audit physical infrastructure to determine current and projected needs</li> <li>3. Maintain a replenishment cycle for upgrading network hardware at all schools, gradually increasing reliability and access</li> <li>4. Continue to consolidate, centralize and virtualize servers to reduce cost and improve manageability of server based systems.</li> <li>5. Create a network test lab for evaluation of new technology</li> </ol>	Published acceptable use policy for technology facilities Report from audit Upgraded network hardware at schools Virtualized servers; Improved manageability; reduced cost Network test lab installed
Goal 4.1 Provide resources and support to ensure that every student has access to a personal	TG3 T1.2 Maintain Internet service that allows for appropriate speed and redundancy to meet the requirements for online learning, virtual classrooms, and high stakes	<ol style="list-style-type: none"> <li>1. Add Additional Internet capacity by adding a second connection.</li> <li>2. Maintain speed of primary Internet access service to 100Mbps.</li> <li>3. Add a secondary Internet access service of 100Mbps.</li> </ol>	Operational link to the Internet



VDOE Objectives	ACPS Technology Goal	Action	Progress Measures
computing device.	testing.		
Goal 4.1 Provide resources and support to ensure that every student has access to a personal computing device.	TG3 T1.3 Retro fit older wireless networks to increase speed and manageability	1. Maintain wireless connectivity throughout ACPS. Replace or upgrade as needed to maintain an operational level of connectivity for the students and staff	Wireless networking throughout schools
Goal 4.1 Provide resources and support to ensure that every student has access to a personal computing device.	TG3 T1.4 Continue to provide off-site access to the ACPS network for students and staff.	1. Continue providing dial-in service for all 9th through 12th grade students 2. Manage filters on student devices configured for off-site Internet access 3. Continue to expand availability of ACPS resources to off-site personnel via VPN and communication servers	Usage report Installation on student laptops; Increased number of staff with off-site access
Goal 4.1 Provide resources and support to ensure that every student has access to a personal computing device	TG3 T2.1 Maintain an efficient and competent technical staff to support increasingly high levels of use of available resources.	1. Continue to provide technical staff with formal and informal training 2. Continue to use our helpdesk management system, monitor and meet service levels and adjust training, procedures and staffing when appropriate. 3. Use a process approach to improve key technical support processes to increase productivity. 4. Continue to conduct annual performance review of helpdesk operations.	Reports from Service Desk management system and results of TS Customer Satisfaction Survey.
Goal 4.1 Provide resources and support to ensure that every student has access to a personal computing device	TG3 T2.2 Use a multifaceted approach to technical support throughout the system.	1. Maintain a serviceable number of technicians 2. Use school-based teacher technology leadership groups to provide additional support structure and decrease loss of instructional time 3. Improve customer service and up-time by the use of remote diagnostic tools to increase 1st contact resolution.	Reports from Service Desk management system to make data driven decisions for staffing
Goal 4.2 "Provide technical and pedagogical support to ensure that students,	TG1 T1.2 Provide software including course management tools, curricular support, assessment systems and productivity	1. Continue annual reviews of student and teacher images. 2. Maintain annual process to update teacher computer with most recent image	Review and feedback documentation Documentation of annual image versions



VDOE Objectives	ACPS Technology Goal	Action	Progress Measures
teachers, and administrators can effectively access and use technology tools."			
Goal 4.2 "Provide technical and pedagogical support to ensure that students, teachers, and administrators can effectively access and use technology tools."	TG1 T1.3 Provide online subscriptions including research databases and collaborative systems.	<ol style="list-style-type: none"> <li>1. Provide Blackboard as a content management and collaboration system.</li> <li>2. Provide content area resources through online subscriptions to ensure division-wide accessibility.</li> <li>3. Interface online subscriptions with Blackboard.</li> <li>4. Establish committee to meet annually to review needs, usage and requests for software and online subscriptions.</li> </ol>	Access provided to all staff and students Accessible and renewed subscriptions
Goal 4.2 "Provide technical and pedagogical support to ensure that students, teachers, and administrators can effectively access and use technology tools."	TG1 T2.3 Increase participation in online learning opportunities to address diverse student and faculty needs.	<ol style="list-style-type: none"> <li>1. Identify policy and operational barriers to providing online learning options to students and assist in the development of district policy that will eliminate such barriers.</li> <li>2. Increase operational capacity to enable every ACPS high school student to enroll in at least one online course beginning with the 2012-13 school year.</li> <li>3. Identify and implement strategies to use online learning to serve at-risk students, enabling them to reach the goal of graduation.</li> <li>4. Build the capacity to have ACPS teachers trained in online instruction thus reducing the need to use online teachers from outside providers.</li> <li>5. Explore and create collaborative agreements with neighboring districts and programs to increase capacity and services of the online learning options provided.</li> <li>6. Expand online learning options to middle school.</li> <li>7. Explore the feasibility of creating a full-time online program option for ACPS students.</li> <li>8. Create and implement a marketing plan to spread awareness about online learning options provided by ACPS-OLP to students, parents, ACPS staff, and the community at-large.</li> <li>9. Continually assess the courses and services offered by ACPS-OLP to ensure alignment with student and district academic needs.</li> </ol>	Enrollment, student, teacher, parent feedback
Goal 4.2 "Provide technical and pedagogical support to ensure that students, teachers, and	TG1 T2.5 Establish Programs in which students facilitate the use of technology in the schools	<ol style="list-style-type: none"> <li>1. Develop senior experience program for HS seniors to intern with Technology Services</li> <li>2. Develop Technology Services Summer Internship program</li> <li>3. Develop school-based student programs (e.g. SWAT for elementary and GENYES for secondary)</li> </ol>	Feedback from SWAT and GENYES program participants



<b>VDOE Objectives</b>	<b>ACPS Technology Goal</b>	<b>Action</b>	<b>Progress Measures</b>
administrators can effectively access and use technology tools."			
Goal 4.2 "Provide technical and pedagogical support to ensure that students, teachers, and administrators can effectively access and use technology tools."	TG1 T3.2 Monitor and assess the integration of technology into instruction across all grade levels	<ol style="list-style-type: none"> <li>1. Write a K-5 and 6-8 version of the high school Technology Integration Rubric.</li> <li>2. Pilot the use of the Technology Integration Rubrics in a variety of classrooms and grade levels, with administrators.</li> <li>3. Reflect, monitor and adjust Technology Integration Rubrics for expanded use.</li> </ol>	Technology integration indicators
Goal 4.2 "Provide technical and pedagogical support to ensure that students, teachers, and administrators can effectively access and use technology tools."	TG2 T1.1 Increase proficiency among ACPS staff in using essential resources/systems (ie: student information system, email, online portal, network services).	<ol style="list-style-type: none"> <li>1. Provide mandated orientation days for newly hired staff dedicated to hands-on training.</li> <li>2. Revise practices for providing ongoing hands-on training for current employees.</li> <li>3. Provide all directions and training materials on Blackboard.</li> </ol>	Documentation, agenda and feedback of orientation days Identifiable plan of action Published directory of centrally located directions and training materials
Goal 4.2 "Provide technical and pedagogical support to ensure that students, teachers, and administrators can effectively access and use technology tools."	TG2 T1.2 Increase embedded professional development opportunities for teachers within the school day.	<ol style="list-style-type: none"> <li>1. Create and implement school-wide professional development plan through the coordination of the TIS with building administrators. Integrate professional development opportunities with school-based professional development programs.</li> <li>2. Document school-based professional development offerings including individual, group, coaching, modeling and just-in-time training.</li> <li>3. Structure individualized technology integration classes that focuses on professional goals, reflections, authentic products and online alternatives to face-to-face instruction.</li> </ol>	School wide professional development plan for all buildings Documentation of staff development offerings, including data on increased teacher usage and student products Documentation of individual school offerings that are aligned with stated actions, participant feedback, and instructor



VDOE Objectives	ACPS Technology Goal	Action	Progress Measures
			feedback
Goal 4.2 "Provide technical and pedagogical support to ensure that students, teachers, and administrators can effectively access and use technology tools."	TG2 T1.3 Maintain professional development opportunities for teachers that extend the learning environment	<ol style="list-style-type: none"> <li>1. Participation of teacher cohorts in ongoing study and research such as Action Research and Teacher Leadership projects.</li> <li>2. Continue to evaluate and modify technology licensure program to not only include exposure to all ACPS resources and state requirements but also individualized professional goals, reflections, authentic products and online alternatives to face-to-face instruction.</li> <li>3. Connect teacher and staff with online courses and webinars provided by outside organizations such as North Tier and PBS.</li> </ol>	Documentation of staff development offerings, including data on increased teacher usage and student products
Goal 4.2 "Provide technical and pedagogical support to ensure that students, teachers, and administrators can effectively access and use technology tools."	TG2 T1.4 Provide tiered learning opportunities for teachers in the area of instructional technology.	<ol style="list-style-type: none"> <li>1. Delineate multiple levels of application for instructional technology resources.</li> <li>2. Establish common goals and delivery methods for facilitators of professional development.</li> </ol>	Published matrix Published facilitator's guide
Goal 4.2 "Provide technical and pedagogical support to ensure that students, teachers, and administrators can effectively access and use technology tools."	TG2 T2.1 Provide instructional leaders (administrators, directors, coaches, specialists) learning opportunities that identify effective practices.	<ol style="list-style-type: none"> <li>1. Foster collaboration among instructional coaches and Technology Integration Specialists (TIS) through common training and planning sessions</li> <li>2. Model use of instructional technology tools and resources in leadership meetings.</li> <li>3. Participate in site Technology Services sponsored by the National School Board Association.</li> <li>4. Pilot technology integration leadership project for administrators.</li> </ol>	Documentation of involvement with identified group Document use of instructional technology tools and resources in leadership meetings Documentation of attendance and team reflection Documentation of attendance Documentation of walk-



VDOE Objectives	ACPS Technology Goal	Action	Progress Measures
			throughs
Goal 4.2 "Provide technical and pedagogical support to ensure that students, teachers, and administrators can effectively access and use technology tools."	TG2 T3.1 Increase proficiency among ACPS non-licensed staff in using essential resources/systems (ie: student information system, email, online portal, network services).	<ol style="list-style-type: none"> <li>1. Provide mandated orientation times for newly hired staff dedicated to hands-on training.</li> <li>2. Revise practices for providing ongoing hands-on training for current employees.</li> <li>3. Provide all directions and training materials on Blackboard.</li> </ol>	Documentation, agenda and feedback of orientation days Identifiable plan of action Published directory of centrally located directions and training materials
Goal 4.2 "Provide technical and pedagogical support to ensure that students, teachers, and administrators can effectively access and use technology tools."	TG2 T3.2 Provide enhanced staff development for administrative, support and technical staff to ensure highest levels of competency.	<ol style="list-style-type: none"> <li>1. Provide extensive training of Technology Services trainers in both training technique, and in content, to enhance support of all administrative systems.</li> <li>2. Ensure that hardware technicians stay current on all equipment deployed in ACPS.</li> <li>3. Provide extensive, multi-level training in all office productivity software supported by ACPS.</li> <li>4. Ensure that all administrative system end users (new and current) are thoroughly trained in the use of their systems.</li> </ol>	Training schedules, rosters, completion certificates
Goal 4.2 "Provide technical and pedagogical support to ensure that students, teachers, and administrators can effectively access and use technology tools."	TG2 T4.1 Use data to inform and guide professional development programs.	<ol style="list-style-type: none"> <li>1. Use student assessment data (test scores, feedback and products) to determine needs for school wide and content specific professional development plans.</li> <li>2. Use workshop evaluation data to determine needs for school wide and content specific professional development plans.</li> <li>3. Use focus groups to provide feedback on professional development needs.</li> </ol>	Annual revision of school wide and content specific professional development plans
Goal 4.2 "Provide technical and pedagogical	TG3 T2.1 Maintain an efficient and competent technical staff to support	<ol style="list-style-type: none"> <li>1. Continue to provide technical staff with formal and informal training</li> <li>2. Continue to use our helpdesk management system, monitor and meet service levels and adjust training, procedures and staffing when appropriate.</li> </ol>	Reports from Service Desk management system and results of TS Customer



VDOE Objectives	ACPS Technology Goal	Action	Progress Measures
support to ensure that students, teachers, and administrators can effectively access and use technology tools."	increasingly high levels of use of available resources.	<ol style="list-style-type: none"> <li>3. Use a process approach to improve key technical support processes to increase productivity.</li> <li>4. Continue to conduct annual performance review of helpdesk operations.</li> </ol>	Satisfaction Survey.
Goal 4.2 "Provide technical and pedagogical support to ensure that students, teachers, and administrators can effectively access and use technology tools."	TG3 T2.2 Use a multifaceted approach to technical support throughout the system.	<ol style="list-style-type: none"> <li>1. Maintain a serviceable number of technicians</li> <li>2. Use school-based teacher technology leadership groups to provide additional support structure and decrease loss of instructional time</li> <li>3. Improve customer service and up-time by the use of remote diagnostic tools to increase 1st contact resolution</li> </ol>	Reports from Service Desk management system to make data driven decisions for staffing
Goal 4.2 "Provide technical and pedagogical support to ensure that students, teachers, and administrators can effectively access and use technology tools."	TG3 T3.1 Maintain applications to support Human Resources (HR), accounting, payroll, purchasing, student data, transportation, maintenance, special education, child nutrition, and student information.	<ol style="list-style-type: none"> <li>1. Maintain hardware and software supporting administrative systems to support increasing demand</li> <li>2. Acquire integrated business and technological solution that will support and streamline operations for human resources, payroll, benefits, budget and finance.</li> <li>3. Implement an integrated business and technological solution that will support and streamline operations for human resources, payroll, benefits, budget and finance using a phased approach</li> <li>4. Establish service level agreements between responsible departments and Technology Services to formalize expectations for support</li> <li>5. Retain hardware and software maintenance and support contracts</li> <li>6. Use hosted and managed applications to reduce load on financial resources</li> <li>7. Provide annual assessment of management systems with regard to their effectiveness and support requirements.</li> </ol>	Documentation of technical architecture and maintenance, Project Plan, Project Plan and delivered functionality, Documented service level agreements, Record of hardware and software maintenance contracts, Assess benefits and costs associated with outsourced web hosting, Completed assessment FY 2011
Goal 4.2 "Provide technical and pedagogical support to ensure that students, teachers, and administrators can	TG3 T3.2 Provide a student information system that integrates applications and provides timely access to student data.	<ol style="list-style-type: none"> <li>1. Maintain a new student information system that is centralized, provides web-accessibility and is compliant with state reporting and School Interoperability Framework (SIF).</li> <li>2. Create a customization timeline that will prioritize and provide increasing access and usability to SIS data.</li> <li>3. Integrate new AMS with Blackboard.</li> <li>4. Provide tiered training program for users based on their role in the division.</li> <li>5. Provide training through multiple venues, including face-to-face workshops, webinars,</li> </ol>	SIS statistics and documentation Implementation Plan Implementation Plan, Single sign-on capabilities Training plan, Training materials, participation



<b>VDOE Objectives</b>	<b>ACPS Technology Goal</b>	<b>Action</b>	<b>Progress Measures</b>
effectively access and use technology tools."		recorded material, and online resources.	statistics
Goal 4.2 "Provide technical and pedagogical support to ensure that students, teachers, and administrators can effectively access and use technology tools."	TG4 T1.1 Maintain Data-Driven Decision Making Governance Group	<ol style="list-style-type: none"> <li>1. Establish Project Charter indicating membership and roles and responsibilities</li> <li>2. Organize and discuss enterprise-wide issues and initiatives</li> </ol>	Coordinated and Signed Project Charter Meeting Schedule
Goal 4.2 "Provide technical and pedagogical support to ensure that students, teachers, and administrators can effectively access and use technology tools."	TG4 T3.1 Customize, monitor and maintain Student Information System	<ol style="list-style-type: none"> <li>1. Upgrade software with new builds</li> <li>2. Refine and update user roles to allow access to data</li> <li>3. Customize software to fit ACPS business model</li> <li>4. Communicate and train on new features</li> </ol>	Build schedule Survey
Goal 4.2 "Provide technical and pedagogical support to ensure that students, teachers, and administrators can effectively access and use technology tools."	TG4 T 3.2 Provide parents and families online access to student's grade, attendance, and schedule information	<ol style="list-style-type: none"> <li>1. Create account and provide access to secondary parents</li> </ol>	Count of parents accessing the system
Goal 4.2 "Provide technical and pedagogical support to ensure that students, teachers, and administrators can effectively access and use technology tools."	TG4 T 3.3 Develop Assessment Management System	<ol style="list-style-type: none"> <li>1. Configure system to include ACPS curriculum</li> <li>2. Launch system pilot</li> <li>3. Provide training and outreach</li> </ol>	Percentage of curriculum incorporated in the system Survey



VDOE Objectives	ACPS Technology Goal	Action	Progress Measures
support to ensure that students, teachers, and administrators can effectively access and use technology tools."			
Goal 4.3 "Identify and disseminate information and resources that assist educators in selecting authentic and appropriate tools for all grade levels and curricular areas."	TG1 T1.2 Provide software including course management tools, curricular support, assessment systems and productivity	<ol style="list-style-type: none"> <li>1. Continue annual reviews of student and teacher images.</li> <li>2. Maintain annual process to update teacher computer with most recent image</li> </ol>	Review and feedback documentation Documentation of annual image versions
Goal 4.3 "Identify and disseminate information and resources that assist educators in selecting authentic and appropriate tools for all grade levels and curricular areas."	TG1 T1.3 Provide online subscriptions including research databases and collaborative systems.	<ol style="list-style-type: none"> <li>1. Provide Blackboard as a content management and collaboration system.</li> <li>2. Provide content area resources through online subscriptions to ensure division-wide accessibility.</li> <li>3. Interface online subscriptions with Blackboard.</li> <li>4. Establish committee to meet annually to review needs, usage and requests for software and online subscriptions.</li> </ol>	Access provided to all staff and students Accessible and renewed subscriptions All subscriptions accessible through Blackboard Meeting agendas, schedules and reports
Goal 4.3 "Identify and disseminate information and resources that assist educators in selecting authentic and appropriate tools	TG1 T2.1 Identify and align resources and tools with ACPS curriculum	<ol style="list-style-type: none"> <li>1. Update existing resources vetted and supported by ACPS.</li> <li>2. Align existing resources (including assistive technology) with new ACPS curriculum</li> <li>3. Research additional tools and resources that address the characteristics of a rich learning environment.</li> </ol>	Detailed action plan 08-09



VDOE Objectives	ACPS Technology Goal	Action	Progress Measures
for all grade levels and curricular areas."			
Goal 4.3 "Identify and disseminate information and resources that assist educators in selecting authentic and appropriate tools for all grade levels and curricular areas."	TG1 T2.2 Identify and evaluate innovative and promising practices using exemplars collected during instruction and professional	<ol style="list-style-type: none"> <li>1. Create a process (rubric, submission, review) to identify qualities of teacher/student work that demonstrates characteristics of rich learning environment.</li> <li>2. Collect exemplary teacher/student work samples.</li> <li>3. Provide access to collected samples through Blackboard.</li> </ol>	Detailed action plan 08-09
Goal 4.3 "Identify and disseminate information and resources that assist educators in selecting authentic and appropriate tools for all grade levels and curricular areas."	TG1 T2.3 Increase participation in online learning opportunities to address diverse student and faculty needs.	<ol style="list-style-type: none"> <li>1. Identify policy and operational barriers to providing online learning options to students and assist in the development of district policy that will eliminate such barriers.</li> <li>2. Increase operational capacity to enable every ACPS high school student to enroll in at least one online course beginning with the 2012-13 school year.</li> <li>3. Identify and implement strategies to use online learning to serve at-risk students, enabling them to reach the goal of graduation.</li> <li>4. Build the capacity to have ACPS teachers trained in online instruction thus reducing the need to use online teachers from outside providers.</li> <li>5. Explore and create collaborative agreements with neighboring districts and programs to increase capacity and services of the online learning options provided.</li> <li>6. Expand online learning options to middle school.</li> <li>7. Explore the feasibility of creating a full-time online program option for ACPS students.</li> <li>8. Create and implement a marketing plan to spread awareness about online learning options provided by ACPS-OLP to students, parents, ACPS staff, and the community at-large.</li> <li>9. Continually assess the courses and services offered by ACPS-OLP to ensure alignment with student and district academic needs.</li> </ol>	Enrollment, student, teacher, parent feedback
Goal 4.3 "Identify and disseminate information and resources that assist educators in selecting	TG1 T2.4 Expand division and school based programs of digital citizenship and Internet safety.	<ol style="list-style-type: none"> <li>1. Incorporate Internet Safety lessons into the Character Counts program in the elementary schools.</li> <li>2. Broadcast Public Service Announcements on Internet Safety on school programs and the ACPS community cable channel.</li> <li>3. Partner with NetSmartz and Wired Safety to provide current resources.</li> <li>4. Form an action research group to explore issues around Digital Citizenship.</li> </ol>	Updated curriculum lessons Broadcast frequency Membership on advisory council/ committees Recommendations from



<b>VDOE Objectives</b>	<b>ACPS Technology Goal</b>	<b>Action</b>	<b>Progress Measures</b>
authentic and appropriate tools for all grade levels and curricular areas."		5. Incorporate Internet Safety training into peer mediation program expectations. 6. Integrate Internet Safety into annual school plans and their instructional program. 7. Organize student clubs that support use of technology in schools.	research group Student-oriented training program School Plan
Goal 4.3 "Identify and disseminate information and resources that assist educators in selecting authentic and appropriate tools for all grade levels and curricular areas."	TG1 T2.5 Establish Programs in which students facilitate the use of technology in the schools	1. Develop senior experience program for HS seniors to intern with Technology Services 2. Develop Technology Services Summer Internship program 3. Develop school-based student programs (e.g. SWAT for elementary and GENYES for secondary)	Feedback from SWAT and GENYES program participants
Goal 4.3 "Identify and disseminate information and resources that assist educators in selecting authentic and appropriate tools for all grade levels and curricular areas."	TG1 T3.2 Monitor and assess the integration of technology into instruction across all grade levels	1. Write a K-5 and 6-8 version of the high school Technology Integration Rubric. 2. Pilot the use of the Technology Integration Rubrics in a variety of classrooms and grade levels, with administrators. 3. Reflect, monitor and adjust Technology Integration Rubrics for expanded use.	Technology integration indicators



**Virginia Department of Education Goal 5 - "Use technology to support a culture of data-driven decision making that relies upon data to evaluate and improve teaching and learning."**

VA Objectives	ACPS Technology Goal	Action	Progress Measures
Goal 5.1 Use data to inform and adjust technical, pedagogical, and financial support.	TG1 T3.3 Gather data on effective technology integration.	<ol style="list-style-type: none"> <li>1. Every ACPS classroom teacher will take the LoTi (Level of Technology Innovation) survey to determine levels of resource usage and technology integration.</li> <li>2. Retest ACPS staff each year to determine changes in technology integration.</li> </ol>	Review schedule Database
Goal 5.1 Use data to inform and adjust technical, pedagogical, and financial support.	TG2 T1.1 Increase proficiency among ACPS staff in using essential resources/systems (ie: student information system, email, online portal, network services).	<ol style="list-style-type: none"> <li>1. Provide mandated orientation days for newly hired staff dedicated to hands-on training.</li> <li>2. Revise practices for providing ongoing hands-on training for current employees.</li> <li>3. Provide all directions and training materials on Blackboard.</li> </ol>	Documentation, agenda and feedback of orientation days Identifiable plan of action Published directory of centrally located directions and training materials
Goal 5.1 Use data to inform and adjust technical, pedagogical, and financial support.	TG2 T1.2 Increase embedded professional development opportunities for teachers within the school day.	<ol style="list-style-type: none"> <li>1. Create and implement school-wide professional development plan through the coordination of the TIS with building administrators. Integrate professional development opportunities with school-based professional development programs.</li> <li>2. Document school-based professional development offerings including individual, group, coaching, modeling and just-in-time training.</li> <li>3. Structure individualized technology integration classes that focuses on professional goals, reflections, authentic products and online alternatives to face-to-face instruction.</li> </ol>	School wide professional development plan for all buildings Documentation of staff development offerings, including data on increased teacher usage and student products Documentation of individual school offerings that are aligned with stated actions, participant feedback, and instructor feedback
Goal 5.1 Use data to inform and adjust technical, pedagogical, and financial support.	TG2 T1.3 Maintain professional development opportunities for teachers that extend the learning environment	<ol style="list-style-type: none"> <li>1. Participation of teacher cohorts in ongoing study and research such as Action Research and Teacher Leadership projects.</li> <li>2. Continue to evaluate and modify technology licensure program to not only include exposure to all ACPS resources and state requirements but also individualized professional goals, reflections, authentic products and online alternatives to face-to-face instruction.</li> <li>3. Connect teacher and staff with online courses and webinars provided by outside organizations such as North Tier and PBS.</li> </ol>	Documentation of staff development offerings, including data on increased teacher usage and student products



VA Objectives	ACPS Technology Goal	Action	Progress Measures
Goal 5.1 Use data to inform and adjust technical, pedagogical, and financial support.	TG2 T1.4 Provide tiered learning opportunities for teachers in the area of instructional technology.	<ol style="list-style-type: none"> <li>1. Delineate multiple levels of application for instructional technology resources.</li> <li>2. Establish common goals and delivery methods for facilitators of professional development.</li> </ol>	<p>Published matrix Published facilitator's guide</p>
Goal 5.1 Use data to inform and adjust technical, pedagogical, and financial support.	TG2 T2.1 Provide instructional leaders (administrators, directors, coaches, specialists) learning opportunities that identify effective practices.	<ol style="list-style-type: none"> <li>1. Foster collaboration among instructional coaches and Technology Integration Specialists (TIS) through common training and planning sessions</li> <li>2. Model use of instructional technology tools and resources in leadership meetings.</li> <li>3. Participate in site Technology Services sponsored by the National School Board Association.</li> <li>4. Pilot technology integration leadership project for administrators.</li> </ol>	<p>Documentation of involvement with identified group Document use of instructional technology tools and resources in leadership meetings Documentation of attendance and team reflection Documentation of attendance Documentation of walk-throughs</p>
Goal 5.1 Use data to inform and adjust technical, pedagogical, and financial support.	TG2 T3.1 Increase proficiency among ACPS non-licensed staff in using essential resources/systems (ie: student information system, email, online portal, network services).	<ol style="list-style-type: none"> <li>1. Provide mandated orientation times for newly hired staff dedicated to hands-on training.</li> <li>2. Revise practices for providing ongoing hands-on training for current employees.</li> <li>3. Provide all directions and training materials on Blackboard.</li> </ol>	<p>Documentation, agenda and feedback of orientation days Identifiable plan of action Published directory of centrally located directions and training materials</p>
Goal 5.1 Use data to inform and adjust technical, pedagogical, and financial support.	TG2 T3.2 Provide enhanced staff development for administrative, support and technical staff to ensure highest levels of competency.	<ol style="list-style-type: none"> <li>1. Provide extensive training of Technology Services trainers in both training technique, and in content, to enhance support of all administrative systems.</li> <li>2. Ensure that hardware technicians stay current on all equipment deployed in ACPS.</li> <li>3. Provide extensive, multi-level training in all office productivity software supported by ACPS.</li> <li>4. Ensure that all administrative system end users (new and current) are thoroughly trained in the use of their systems.</li> </ol>	<p>Training schedules, rosters, completion certificates</p>
Goal 5.1 Use data to inform and adjust technical, pedagogical, and financial support.	TG2 T4.1 Use data to inform and guide professional development programs.	<ol style="list-style-type: none"> <li>1. Use student assessment data (test scores, feedback and products) to determine needs for school wide and content specific professional development plans.</li> <li>2. Use workshop evaluation data to determine needs for school wide and content specific professional development plans.</li> <li>3. Use focus groups to provide feedback on professional development needs.</li> </ol>	<p>Annual revision of school wide and content specific professional development plans</p>



VA Objectives	ACPS Technology Goal	Action	Progress Measures
Goal 5.1 Use data to inform and adjust technical, pedagogical, and financial support.	TG3 T3.1 Maintain applications to support Human Resources (HR), accounting, payroll, purchasing, student data, transportation, maintenance, special education, child nutrition, and student information.	<ol style="list-style-type: none"> <li>1. Maintain hardware and software supporting administrative systems to support increasing demand</li> <li>2. Acquire integrated business and technological solution that will support and streamline operations for human resources, payroll, benefits, budget and finance.</li> <li>3. Implement an integrated business and technological solution that will support and streamline operations for human resources, payroll, benefits, budget and finance using a phased approach</li> <li>4. Establish service level agreements between responsible departments and Technology Services to formalize expectations for support</li> <li>5. Retain hardware and software maintenance and support contracts</li> <li>6. Use hosted and managed applications to reduce load on financial resources</li> <li>7. Provide annual assessment of management systems with regard to their effectiveness and support requirements.</li> </ol>	Documentation of technical architecture and maintenance, Project Plan, Project Plan and delivered functionality, Documented service level agreements, Record of hardware and software maintenance contracts, Assess benefits and costs associated with outsourced web hosting, Completed assessment FY 2011
Goal 5.1 Use data to inform and adjust technical, pedagogical, and financial support.	TG3 T3.2 Provide a student information system that integrates applications and provides timely access to student data.	<ol style="list-style-type: none"> <li>1. Maintain a new student information system that is centralized, provides web-accessibility and is compliant with state reporting and School Interoperability Framework (SIF).</li> <li>2. Create a customization timeline that will prioritize and provide increasing access and usability to SIS data.</li> <li>3. Integrate new AMS with Blackboard.</li> <li>4. Provide tiered training program for users based on their role in the division.</li> <li>5. Provide training through multiple venues, including face-to-face workshops, webinars, recorded material, and online resources.</li> </ol>	SIS statistics and documentation Implementation Plan Implementation Plan, Single sign-on capabilities Training plan, Training materials, participation statistics
Goal 5.1 Use data to inform and adjust technical, pedagogical, and financial support	TG4 T1.1 Maintain Data-Driven Decision Making Governance Group	<ol style="list-style-type: none"> <li>1. Establish Project Charter indicating membership and roles and responsibilities</li> <li>2. Organize and discuss enterprise-wide issues and initiatives</li> </ol>	Coordinated and Signed Project Charter Meeting Schedule
Goal 5.1 Use data to inform and adjust technical, pedagogical, and financial support	TG4 T 1.2 Develop Standard Project Request Process	<ol style="list-style-type: none"> <li>1. Coordinate and implement standard IT project request and approval process</li> </ol>	Coordinated and approved Process
Goal 5.1 Use data to inform and adjust technical, pedagogical, and financial support	TG4 T2.1 Conduct analysis of data entry processes	<ol style="list-style-type: none"> <li>1. Analyze of AS-IS data entry processes executed by the Registrars and develop the TO-BE process</li> <li>2. Analyze of current Registrar position description and develop TO-BE position description</li> <li>3. Launch Registrar User Group to use standard processes</li> </ol>	Standard enrollment, transfer, and withdrawal process Standard position description Meetings



VA Objectives	ACPS Technology Goal	Action	Progress Measures
Goal 5.1 Use data to inform and adjust technical, pedagogical, and financial support	TG4 T2.2 Conduct Re-registration process	1. Verify and update all contact information for rising 3rd, 6th, and 9th graders	Number of parents confirmed
Goal 5.1 Use data to inform and adjust technical, pedagogical, and financial support	TG4 T3.1 Customize Monitor and Maintain Student Information System	<ol style="list-style-type: none"> <li>1. Upgrade software with new builds</li> <li>2. Refine and update user roles to allow access to data</li> <li>3. Customize software to fit ACPS business model</li> <li>4. Communicate and train on new features</li> </ol>	Build schedule Survey
Goal 5.1 Use data to inform and adjust technical, pedagogical, and financial support	TG4 T3.2 Provide parents and families online access to student's grade, attendance, and schedule information	1. Create account and provide access to secondary parents	Count of parents accessing the system
Goal 5.1 Use data to inform and adjust technical, pedagogical, and financial support	TG4 T3.3 Develop Assessment Management System	<ol style="list-style-type: none"> <li>1. Configure system to include ACPS curriculum</li> <li>2. Launch system pilot</li> <li>3. Provide training and outreach</li> </ol>	Percentage of curriculum incorporated in the system Survey
Goal 5.2 "Provide support to help teachers disaggregate, interpret, and use data to plan, improve, and differentiate instruction."	TG1 T1.2 Provide software including course management tools, curricular support, assessment systems and productivity	<ol style="list-style-type: none"> <li>1. Continue annual reviews of student and teacher images.</li> <li>2. Maintain annual process to update teacher computer with most recent image</li> </ol>	Review and feedback documentation Documentation of annual image versions
Goal 5.2 "Provide support to help teachers disaggregate, interpret, and use data to plan, improve, and differentiate instruction.".	TG1 T1.3 Provide online subscriptions including research databases and collaborative systems.	<ol style="list-style-type: none"> <li>1. Provide Blackboard as a content management and collaboration system.</li> <li>2. Provide content area resources through online subscriptions to ensure division-wide accessibility.</li> <li>3. Interface online subscriptions with Blackboard.</li> <li>4. Establish committee to meet annually to review needs, usage and requests for software and online subscriptions.</li> </ol>	Access provided to all staff and students Accessible and renewed subscriptions All subscriptions accessible through Blackboard Meeting agendas, schedules and reports



VA Objectives	ACPS Technology Goal	Action	Progress Measures
Goal 5.2 "Provide support to help teachers disaggregate, interpret, and use data to plan, improve, and differentiate instruction.".	TG2 T1.1 Increase proficiency among ACPS staff in using essential resources/systems (ie: student information system, email, online portal, network services).	<ol style="list-style-type: none"> <li>1. Provide mandated orientation days for newly hired staff dedicated to hands-on training.</li> <li>2. Revise practices for providing ongoing hands-on training for current employees.</li> <li>3. Provide all directions and training materials on Blackboard.</li> </ol>	Documentation, agenda and feedback of orientation days Identifiable plan of action Published directory of centrally located directions and training materials
Goal 5.2 "Provide support to help teachers disaggregate, interpret, and use data to plan, improve, and differentiate instruction.".	TG2 T1.2 Increase embedded professional development opportunities for teachers within the school day.	<ol style="list-style-type: none"> <li>1. Create and implement school-wide professional development plan through the coordination of the TIS with building administrators. Integrate professional development opportunities with school-based professional development programs.</li> <li>2. Document school-based professional development offerings including individual, group, coaching, modeling and just-in-time training.</li> <li>3. Structure individualized technology integration classes that focuses on professional goals, reflections, authentic products and online alternatives to face-to-face instruction.</li> </ol>	School wide professional development plan for all buildings Documentation of staff development offerings, including data on increased teacher usage and student products Documentation of individual school offerings that are aligned with stated actions, participant feedback, and instructor feedback
Goal 5.2 "Provide support to help teachers disaggregate, interpret, and use data to plan, improve, and differentiate instruction.".	TG2 T1.3 Maintain professional development opportunities for teachers that extend the learning environment	<ol style="list-style-type: none"> <li>1. Participation of teacher cohorts in ongoing study and research such as Action Research and Teacher Leadership projects.</li> <li>2. Continue to evaluate and modify technology licensure program to not only include exposure to all ACPS resources and state requirements but also individualized professional goals, reflections, authentic products and online alternatives to face-to-face instruction.</li> <li>3. Connect teacher and staff with online courses and webinars provided by outside organizations such as North Tier and PBS.</li> </ol>	Documentation of staff development offerings, including data on increased teacher usage and student products
Goal 5.2 "Provide support to help teachers disaggregate, interpret, and use data to plan,	TG2 T1.4 Provide tiered learning opportunities for teachers in the area of instructional technology.	<ol style="list-style-type: none"> <li>1. Delineate multiple levels of application for instructional technology resources.</li> <li>2. Establish common goals and delivery methods for facilitators of professional development.</li> </ol>	Published matrix Published facilitator's guide



VA Objectives	ACPS Technology Goal	Action	Progress Measures
improve, and differentiate instruction."			
Goal 5.2 "Provide support to help teachers disaggregate, interpret, and use data to plan, improve, and differentiate instruction."	TG2 T2.1 Provide instructional leaders (administrators, directors, coaches, specialists) learning opportunities that identify effective practices.	<ol style="list-style-type: none"> <li>1. Foster collaboration among instructional coaches and Technology Integration Specialists (TIS) through common training and planning sessions</li> <li>2. Model use of instructional technology tools and resources in leadership meetings.</li> <li>3. Participate in site Technology Services sponsored by the National School Board Association.</li> <li>4. Pilot technology integration leadership project for administrators.</li> </ol>	Documentation of involvement with identified group Document use of instructional technology tools and resources in leadership meetings Documentation of attendance and team reflection Documentation of attendance Documentation of walk-throughs
Goal 5.2 "Provide support to help teachers disaggregate, interpret, and use data to plan, improve, and differentiate instruction."	TG2 T3.1 Increase proficiency among ACPS non-licensed staff in using essential resources/systems (ie: student information system, email, online portal, network services).	<ol style="list-style-type: none"> <li>1. Provide mandated orientation times for newly hired staff dedicated to hands-on training.</li> <li>2. Revise practices for providing ongoing hands-on training for current employees.</li> <li>3. Provide all directions and training materials on Blackboard.</li> </ol>	Documentation, agenda and feedback of orientation days Identifiable plan of action Published directory of centrally located directions and training materials
Goal 5.2 "Provide support to help teachers disaggregate, interpret, and use data to plan, improve, and differentiate instruction."	TG2 T3.2 Provide enhanced staff development for administrative, support and technical staff to ensure highest levels of competency.	<ol style="list-style-type: none"> <li>1. Provide extensive training of Technology Services trainers in both training technique, and in content, to enhance support of all administrative systems.</li> <li>2. Ensure that hardware technicians stay current on all equipment deployed in ACPS.</li> <li>3. Provide extensive, multi-level training in all office productivity software supported by ACPS.</li> <li>4. Ensure that all administrative system end users (new and current) are thoroughly trained in the use of their systems.</li> </ol>	Training schedules, rosters, completion certificates



VA Objectives	ACPS Technology Goal	Action	Progress Measures
Goal 5.2 "Provide support to help teachers disaggregate, interpret, and use data to plan, improve, and differentiate instruction.".	TG2 T4.1 Use data to inform and guide professional development programs.	<ol style="list-style-type: none"> <li>1. Use student assessment data (test scores, feedback and products) to determine needs for school wide and content specific professional development plans.</li> <li>2. Use workshop evaluation data to determine needs for school wide and content specific professional development plans.</li> <li>3. Use focus groups to provide feedback on professional development needs.</li> </ol>	Annual revision of school wide and content specific professional development plans
Goal 5.2 "Provide support to help teachers disaggregate, interpret, and use data to plan, improve, and differentiate instruction.".	TG4 T1.1 Maintain Data-Driven Decision Making Governance Group	<ol style="list-style-type: none"> <li>1. Establish Project Charter indicating membership and roles and responsibilities</li> <li>2. Organize and discuss enterprise-wide issues and initiatives</li> </ol>	Coordinated and Signed Project Charter Meeting Schedule
Goal 5.2 "Provide support to help teachers disaggregate, interpret, and use data to plan, improve, and differentiate instruction.".	TG4 T1.2 Develop Standard Project Request Process	<ol style="list-style-type: none"> <li>1. Coordinate and implement standard IT project request and approval process</li> </ol>	Coordinated and approved Process
Goal 5.2 "Provide support to help teachers disaggregate, interpret, and use data to plan, improve, and differentiate instruction.".	TG4 T3.1 Customize Monitor and Maintain Student Information System	<ol style="list-style-type: none"> <li>1. Upgrade software with new builds</li> <li>2. Refine and update user roles to allow access to data</li> <li>3. Customize software to fit ACPS business model</li> <li>4. Communicate and train on new features</li> </ol>	Build schedule Survey



VA Objectives	ACPS Technology Goal	Action	Progress Measures
Goal 5.2 "Provide support to help teachers disaggregate, interpret, and use data to plan, improve, and differentiate instruction."	TG4 T3.3 Develop Assessment Management System	<ol style="list-style-type: none"> <li>1. Configure system to include ACPS curriculum</li> <li>2. Launch system pilot</li> <li>3. Provide training and outreach</li> </ol>	Percentage of curriculum incorporated in the system Survey
Goal 5.3 "Promote the use of technology to inform the design and implementation of nextgeneration standardized assessments."	TG1 T1.2 Provide software including course management tools, curricular support, assessment systems and productivity	<ol style="list-style-type: none"> <li>1. Continue annual reviews of student and teacher images.</li> <li>2. Maintain annual process to update teacher computer with most recent image</li> </ol>	Review and feedback documentation Documentation of annual image versions
Goal 5.3 "Promote the use of technology to inform the design and implementation of nextgeneration standardized assessments."	TG1 T1.3 Provide online subscriptions including research databases and collaborative systems.	<ol style="list-style-type: none"> <li>1. Provide Blackboard as a content management and collaboration system.</li> <li>2. Provide content area resources through online subscriptions to ensure division-wide accessibility.</li> <li>3. Interface online subscriptions with Blackboard.</li> <li>4. Establish committee to meet annually to review needs, usage and requests for software and online subscriptions.</li> </ol>	Access provided to all staff and students Accessible and renewed subscriptions All subscriptions accessible through Blackboard Meeting agendas, schedules and reports
Goal 5.3 "Promote the use of technology to inform the design and implementation of nextgeneration standardized assessments."	TG4 T1.1 Maintain Data-Driven Decision Making Governance Group	<ol style="list-style-type: none"> <li>1. Establish Project Charter indicating membership and roles and responsibilities</li> <li>2. Organize and discuss enterprise-wide issues and initiatives</li> </ol>	Coordinated and Signed Project Charter Meeting Schedule



VA Objectives	ACPS Technology Goal	Action	Progress Measures
Goal 5.3 "Promote the use of technology to inform the design and implementation of nextgeneration standardized assessments."	TG4 T1.2 Develop Standard Project Request Process	1. Coordinate and implement standard IT project request and approval process	Coordinated and approved Process
Goal 5.3 "Promote the use of technology to inform the design and implementation of nextgeneration standardized assessments."	TG4 T3.3 Develop Assessment Management System	1. Configure system to include ACPS curriculum 2. Launch system pilot 3. Provide training and outreach	Percentage of curriculum incorporated in the system Survey



## Appendix 1: Timetable and Budget for goals, objectives, strategies, and measures

Technology Goal: Learning Environment							
Tactic 1: Provide standardized tools and resources.							
Status: Currently the high school technology project provides a standardized 1:1 computing environment. In 2007-08 the standardization process began in the middle and elementary schools and was completed in 2009-2010.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T1.1:</b> Provide necessary hardware including laptops, workstations, presentation systems and interactive tools.	1. Maintain an updated inventory of hardware that will be supported by Technology Services.	EOB →			Technology Services, Facilities	Inventory document	It is essential that we provide our students and staff with reliable equipment that is appropriate to the tasks at hand. Hardware, software, and on-line subscriptions consume the largest portion of the Instructional Technology budget. Standardizing the purchase and allotment of equipment best allows us to satisfy budgetary constraints, project budgetary requests while meeting the needs of our students, teachers and staff.
	2. Maintain process to evaluate existing hardware standards and to review needs for additional instructional technology hardware purchases.	EOB →			Technology Services, ACAT	Documentation of evaluation process	
	3. Maintain a four year replenishment cycle that provides each middle school with mobile computer carts that support at least a 3:1 ratio of students to computers.	EOB	\$195,000	\$195,000	Technology Services	Inventory reference	



<b>Technology Goal:</b> Learning Environment							
<b>Tactic 1:</b> Provide standardized tools and resources.							
<b>Status:</b> Currently the high school technology project provides a standardized 1:1 computing environment. In 2007-08 the standardization process began in the middle and elementary schools and was completed in 2009-2010.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
	4. Maintain a four year replenishment cycle that provides each elementary school with at least a 4:1 ratio of students to computers.	Funds from VA SOL Technology Initiative	\$400,000	\$400,000	Technology Services	Inventory reference	<ul style="list-style-type: none"> <li>Teacher laptop ratio requires the annual purchase of approximately 200 laptops.</li> </ul>



<b>Technology Goal:</b> Learning Environment							
<b>Tactic 1:</b> Provide standardized tools and resources.							
<b>Status:</b> Currently the high school technology project provides a standardized 1:1 computing environment. In 2007-08 we began a standardization process in the middle and elementary schools.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T1.1:</b> Provide necessary hardware including laptops, workstations, presentation systems and interactive tools.	5. Maintain a replenishment cycle that provides high school students with a 1:1 ratio.	EOB →			Technology Services	Inventory reference	Continued from above.
	6. Maintain a four year replenishment cycle for career and technical secondary program areas.	Carl Perkins Grant →			Technology Services	Inventory reference	
	7. Maintain a four year replenishment cycle that provides a 1:1 laptop ratio for teachers.	EOB →			Technology Services	Inventory reference	
	8. Maintain a four year replenishment cycle that provides a 1:1 ratio for administrators and non teaching staff.	EOB →			Technology Services	Inventory reference	
	9. Maintain a standard for an lcd projector and document camera to be placed in all classrooms and other instructional settings where appropriate.	EOB			Technology Services	Presentation system plan	
	10. Explore applications and benefits of interactive tools in classrooms.	EOB	\$50,000	\$50,000	Technology Services, ACAT	Feedback/results from the following groups:  -Teacher focus groups	



<b>Technology Goal:</b> Learning Environment							
<b>Tactic 1:</b> Provide standardized tools and resources.							
<b>Status:</b> Currently the high school technology project provides a standardized 1:1 computing environment. In 2007-08 we began a standardization process in the middle and elementary schools.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
						-NETS*T Participants -Teacher Leadership Project -Teacher Dream Fund Applications	

<b>Technology Goal:</b> Learning Environment							
<b>Tactic 1:</b> Provide standardized tools and resources.							
<b>Status:</b> Currently elementary, middle and high school student and teacher computers have an annually reviewed image.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T1.2:</b> Provide software including course management tools, curricular support, assessment systems and productivity.	1. Continue annual reviews of student and teacher images.	EOB	→		Technology Services, ACAT	Review and feedback documentation	Standardized images increase the life and the usability of our computers. Student instruction and staff training is more effectively delivered.
	2. Maintain annual process to update teacher computer with most recent image	EOB	→		Technology Services	Documentation of annual image versions	



<b>Technology Goal: Learning Environment</b>							
<b>Tactic 1: Provide standardized tools and resources.</b>							
<b>Status:</b> Currently we have many subscriptions to web based resources available for student and teacher use. All are listed and available through Blackboard but many require separate log-ins.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T1.3:</b> Provide online subscriptions including research databases and collaborative systems.	1. Provide Blackboard as a content management and collaboration system.	EOB	→		Technology Services	Access provided to all staff and students	<p>Increasing the usability of resources is also addressed in Tactic 2. We recognize the need to keep our web resources current and user friendly. A process for evaluating the expansion of our web based resources will allow us to effectively meet this need.</p> <p>The current monthly usage statistics for Blackboard are the following:</p> <p>Number of Active Courses: 973            Number of Active Organizations: 87            Number of Active Users: 6,356 (Note: most elementary students and parents use the same user login for their school)            Number of Instructor/Leader Users: 1585            Page Views on Most Active Date: 61,845            Average Page Views Per Day: 37,067</p>
	2. Provide content area resources through online subscriptions to ensure division-wide accessibility.	EOB	→		Technology Services, Curriculum Specialists	Accessible and renewed subscriptions	
	3. Interface online subscriptions with Blackboard.	EOB	→		Technology Services	All subscriptions accessible through Blackboard	
	4. Maintain committee to meet annually to review needs, usage and requests for software and online subscriptions.	EOB	→		Technology Services	Meeting agendas, schedules and reports	



<b>Technology Goal:</b> Learning Environment							
<b>Tactic 2:</b> Implement promising practices that support a rich learning environment							
<b>Status:</b> Technology resources and tools are currently identified by a wide group of users. We are in need of a system that allows teachers better access to resources and exposure to exemplary student and teacher work.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T2.1:</b> Identify and align resources and tools with ACPS curriculum.	1. Update existing resources vetted and supported by ACPS.	EOB	→		Curriculum and Instruction, ACAT	Detailed action plan 08-09	The availability of new and innovative resources is ever increasing. In order to maximize the utilization of the resources available to teachers we must have them clearly identified and aligned to curricular goals and instructional practices. Teachers need ready access to these resources and have opportunities to see exemplary models of their use.
	2. Align existing resources with new ACPS curriculum	EOB	→		Curriculum and Instruction		
	3. Research additional tools and resources that address the characteristics of a rich learning environment.	EOB	→		Curriculum and Instruction, ACAT		



<b>Technology Goal: Learning Environment</b>							
<b>Tactic 2: Implement promising practices that support a rich learning environment</b>							
<b>Status:</b> Technology resources and tools are currently identified by a wide group of users. We are in need of a system that allows teachers better access to resources and exposure to exemplary student and teacher work.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T2.2:</b> Identify and evaluate innovative and promising practices using exemplars collected during instruction and professional development.	1. Create a process (rubric, submission, review) to identify qualities of teacher/student work that demonstrates characteristics of rich learning environment.	EOB →			Curriculum and Instruction	Detailed action plan 08-09	The availability of teacher and student work examples has been shown to raise expectations and increase achievement. Teachers and students need access to examples that set these high standards. Creating a process for their identification will ensure access to quality work.
	2. Collect exemplary teacher/student work samples.	EOB →			Curriculum and Instruction, Technology Services		
	3. Provide access to collected samples through Blackboard.	EOB →			Curriculum and Instruction, Technology Services		



<b>Technology Goal: Learning Environment</b>							
<b>Tactic 2: Implement promising practices that support a rich learning environment</b>							
<b>Status:</b> Started in 2009, ACPS-OLP currently provides students with over 275 online course options, as well as online learning opportunities such as online tutoring and test preparation. For the 2010-11 school year, 199 ACPS students have enrolled in at least one online course. .							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T2.3:</b> Increase participation in online learning opportunities to address diverse student and faculty needs.	1. Identify policy and operational barriers to providing online learning options to students and assist in the development of district policy that will eliminate such barriers.	EOB →			OLP Coordinator and Curriculum and Instruction	Enrollment, student, teacher, parent feedback	With online courses, ACPS can accomplish the following: <ul style="list-style-type: none"> <li>▪ Expand course offerings</li> <li>▪ Eliminate unnecessary study halls</li> <li>▪ Provide pre-college/pre-career experience of a virtual learning environment</li> <li>▪ Provide more continuity in learning for our transient and diverse student population</li> <li>▪ Provide alternative forms of professional development</li> </ul>
	2. Increase operational capacity to enable every ACPS high school student to enroll in at least one online course beginning with the 2012-13 school year.	EOB →			OLP Coordinator and Curriculum and Instruction	Enrollment, student, teacher, parent feedback	
	3. Identify and implement strategies to use online learning to serve at-risk students, enabling them to reach the goal of graduation.	EOB →			OLP Coordinator and Curriculum and Instruction	Enrollment, student, teacher, parent feedback	



<b>Technology Goal: Learning Environment</b>							
<b>Tactic 2: Implement promising practices that support a rich learning environment</b>							
<b>Status: Started in 2009, ACPS-OLP currently provides students with over 275 online course options, as well as online learning opportunities such as online tutoring and test preparation. For the 2010-11 school year, 199 ACPS students have enrolled in at least one online course. .</b>							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
	4. Build the capacity to have ACPS teachers trained in online instruction thus reducing the need to use online teachers from outside providers.	EOB	→		OLP Coordinator and Curriculum and Instruction	Enrollment, student, teacher, parent feedback	
	5. Explore and create collaborative agreements with neighboring districts and programs to increase capacity and services of the online learning options provided.	EOB	→		OLP Coordinator and Curriculum and Instruction	Enrollment, student, teacher, parent feedback	
	6. Expand online learning options to middle school.	EOB	→		OLP Coordinator and Curriculum and Instruction	Enrollment, student, teacher, parent feedback	



<b>Technology Goal: Learning Environment</b>							
<b>Tactic 2: Implement promising practices that support a rich learning environment</b>							
<b>Status: Started in 2009, ACPS-OLP currently provides students with over 275 online course options, as well as online learning opportunities such as online tutoring and test preparation. For the 2010-11 school year, 199 ACPS students have enrolled in at least one online course. .</b>							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
	7. Explore the feasibility of creating a full-time online program option for ACPS students.	EOB	→		OLP Coordinator and Curriculum and Instruction	Enrollment, student, teacher, parent feedback	
	8. Create and implement a marketing plan to spread awareness about online learning options provided by ACPS-OLP to students, parents, ACPS staff, and the community at-large.	EOB	→		OLP Coordinator and Curriculum and Instruction	Enrollment, student, teacher, parent feedback	
	9. Continually assess the courses and services offered by ACPS-OLP to ensure alignment with student and district academic needs.	EOB			OLP Coordinator and Curriculum and Instruction	Enrollment, student, teacher, parent feedback	



<b>Technology Goal: Learning Environment</b>							
<b>Tactic 2: Implement promising practices that support a rich learning environment</b>							
<b>Status: ACPS piloted several pilot programs to integrate technology and teaching of Internet Safety in the schools and community.</b>							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T2.4:</b> Expand division and school based programs of digital citizenship and Internet safety.	1. Incorporate Internet Safety lessons into the Character Counts program in the elementary schools.	EOB	→		Guidance Counselors	Updated curriculum lessons	As a part of a state mandate, ACPS will submit a specific Internet Safety plan in September 2008. Please see appendix for additional details.
	2. Broadcast Public Service Announcements on Internet Safety on school programs and the ACPS community cable channel.	EOB	→		TISs, Office of Information and Outreach	Broadcast frequency	
	3. Partner with NetSmartz and Wired Safety to provide current resources.	EOB	→		Technology Services and TISs	Membership on advisory council/committees	
	4. Form an action research group to explore issues around Digital Citizenship.	EOB	→		Office of Staff Development	Recommendations from research group	
	5. Incorporate Internet Safety training into peer mediation program expectations.	EOB	→		Guidance Counselors, TISs	Student-oriented training program	
	6. Integrate Internet Safety into annual school plans and their instructional program.	EOB	→		Building Administrators and leadership teams	School Plan	



<b>Technology Goal: Learning Environment</b>							
<b>Tactic 2: Implement promising practices that support a rich learning environment</b>							
<b>Status: ACPS piloted several pilot programs to integrate technology and teaching of Internet Safety in the schools and community.</b>							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
	7. Organize student clubs that support use of technology in schools.	EOB →			Building Administrators and TISs		
<b>T2.5:</b> Establish Programs in which students facilitate the use of technology in the schools	1. Develop senior experience program for HS seniors to intern with Technology Services	EOB →			Technology Services	Feedback	It is critical to have technology integration completed at all levels of the school system. Using the model of students as facilitators of technology, teachers and new students will benefit from additional resources at the school to provide expertise.
	2. Develop Technology Services Summer Internship program	EOB →			Technology Services	Feedback	
	3. Develop school-based student programs (e.g. SWAT for elementary and GENYES for secondary)	EOB →			Technology Services	Feedback from SWAT and GENYES program participants	



<b>Technology Goal: Learning Environment</b>							
<b>Tactic 3:</b> Evaluate how technology is employed appropriately to support a rich learning environment.							
<b>Status:</b> Currently there is no systematic process for monitoring the Computer Technology Standards of Learning (CT/SOLs) within our schools. Efforts have been made to communicate these standards to teachers who are ultimately responsible for their mastery.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T3.1:</b> Monitor and assess student mastery of Virginia's Computer Technology Standards of Learning (SOLs).	1. Identify student work samples (output) that demonstrate mastery of Computer Technology SOLs (CT/SOLs) by grade level.	EOB	→		Technology Services and Curriculum and Instruction	Work sample portfolios organized by grade level	The State of Virginia does not currently test students on mastery of the Computer/Technology SOLs. It is the responsibility of the teachers and administrators to see that this assessment takes place. Exemplars, rubrics and checklists assist teachers in the assessment process.
	2. Provide teachers tools (i.e. rubrics, checklists) to assess student mastery of CT/SOLs.	EOB	→		Technology Services and Curriculum and Instruction	Mastery checklist and portfolios	



<b>Technology Goal: Learning Environment</b>							
<b>Tactic 3:</b> Evaluate how technology is employed appropriately to support a rich learning environment.							
<b>Status:</b> The integration of technology into the curriculum is currently monitored by building administrators, TISs, coaches and classroom teachers themselves and mostly happens through observation. There currently is no tool used to track progress.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T3.2:</b> Monitor and assess the integration of technology into instruction across all grade levels.	1. Write a K-5 and 6-8 version of the high school Technology Integration Rubric.	EOB	→		Technology Services and Building Administrators	Technology integration indicators	In order to monitor the true integration of technology into curricular practices administrators and teachers must have a means of identifying progress and success.
	2. Pilot the use of the Technology Integration Rubrics in a variety of classrooms and grade levels, with administrators.	EOB	→		Technology Services and Building Administrators	Technology integration indicators	
	3. Reflect, monitor and adjust Technology Integration Rubrics for expanded use.	EOB	→		Technology Services and Building Administrators	Technology integration indicators	



<b>Technology Goal: Learning Environment</b>							
<b>Tactic 3:</b> Evaluate how technology is integrated into classroom instruction to support a rich learning environment.							
<b>Status:</b> Currently there is no mechanism in place to determine technology integration in classrooms throughout ACPS.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T3.3:</b> Gather data on effective technology integration.	1. Every ACPS classroom teacher will take the LoTi (Level of Technology Innovation) survey to determine levels of resource usage and technology integration.	EOB	→		Technology Services and Curriculum and Instruction	Review schedule	It is important that we create a process to determine the levels of effective technology integration.
	2. Retest ACPS staff each year to determine changes in technology integration.	EOB	→		Technology Services, Curriculum and Instruction, ACAT	Database	



<b>Technology Goal: Learning Environment</b>							
<b>Tactic 4: Support community understanding of technology resources and practices and their impact on student learning.</b>							
<b>Status:</b> Internet Safety presentations have occurred for all school PTAs and other community forums. Specific schools have conducted evening workshops on different technology related resources. During FY2011 ACPS has created ACPS Academic Access and provided user accounts to parents and students in grades 6-12. Computer Literacy Courses were also created as a result of the EETT Grant awarded in Spring 2010.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T4.1:</b> Provide opportunities for community members to learn about technology resources for their students and themselves.	1. Coordinate with TISs and administrators to identify appropriate forums and audiences for conducting workshops on digital citizenship and Internet safety.	EOB	→		TISs, Building Administrators	Documentation of programs and feedback	Maximizing the investment in our many resources requires our parents and community to be knowledgeable in what they are and how to use them. In addition, it is our responsibility to educate our community about issues surrounding Internet safety. This knowledge and awareness is instrumental to ensure that our students use technology responsibly and productively.  Communication between teacher, student, and parent around academic progress is essential for student growth. Providing this information electronically allows real-time data to be used to support instructional decisions and interventions. In addition, some families do not have access to computer resources and providing these tools and training can improve their participation in their child's education.
	2. Coordinate with TISs and administrators to identify appropriate forums and audiences for conducting workshops on use of Blackboard and ACPS Academic Access.	EOB	→		TISs, Building Administrators	Documentation of programs and feedback	
	3. Coordinate with TISs and instructional leaders to identify appropriate forums and audiences for conducting workshops on programs that integrate technology (i.e., Everyday Math).	EOB	→		TISs, Administrators, Curriculum Specialists	Documentation of programs and feedback	



<b>Technology Goal: Learning Environment</b>							
<b>Tactic 4: Support community understanding of technology resources and practices and their impact on student learning.</b>							
<b>Status: Internet Safety presentations have occurred for all school PTAs and other community forums. Specific schools have conducted evening workshops on different technology related resources. During FY2011 ACPS has created ACPS Academic Access and provided user accounts to parents and students in grades 6-12. Computer Literacy Courses were also created as a result of the EETT Grant awarded in Spring 2010.</b>							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
	4. Provide parents and students real-time access to student data including grades, attendance, and schedules through ACPS Academic Access.	EOB	→		Technology Services	Accounts created, monthly usage reports, Help Desk Requests	
	5. Obtain funding to continue the EETT Grant Community Computer Literacy Project beyond FY2011 with the goal of providing 100 families with computer literacy courses and computer access at home.	EOB	→		Technology Services, Office of Strategic Initiatives	Number of participating families, feedback from participants and instructors, access data	



<b>Technology Goal: Learning Environment</b>							
<b>Tactic 4:</b> Support community understanding of technology resources and practices and their impact on student learning.							
<b>Status:</b> Currently, Technology Services spotlights technology programs at school board meetings, family involvement rallies and PTA meetings.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T4.2:</b> Increase awareness of technology integration by spotlighting student and teacher work samples.	1. Building principals share student/teacher products.	EOB	→		Building Administrators, TISs	Documentation as collected by TISs	We recognize the need to spotlight examples of student and teacher works in order to help diverse audiences better understand our resources and practices as they support student learning. This is best accomplished when the responsibility is shared by all ACPS departments and offices with outreach capacity.
	2. ACPS web page highlights student and teacher products and testimonials.	EOB	→		Technology Services and Web Administrator	Updated webpage	
	3. Office of Information and Outreach shares student/teacher products with community.	EOB	→		Technology Services and Office of Information and Outreach	Documentation of ACPS cable broadcasts, press releases, news articles	
	4. Family Involvement coordinator shares program and resource information.	EOB	→		Technology Services and Family Involvement Coordinator	Semi-annual coordination meeting	
	5. Present workshops highlighting ACPS teacher and student work at local, state and national conferences and meetings.				Technology Services	Shared presentations	



<b>Technology Goal: Learning Environment</b>							
<b>Tactic 4: Support community understanding of technology resources and practices and their impact on student learning.</b>							
<b>Status:</b> As part of the High School Integration project there have been numerous opportunities for student, teacher and parent feedback via surveys and focus groups. Similar opportunities at the elementary and middle school level need to be organized.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T4.3:</b> Provide opportunities for students, teachers and community to provide feedback regarding technology resources.	1. Survey teacher and student use of software, online subscriptions and hardware to solicit feedback on technology	EOB →			Technology Services, Curriculum and Instruction, Building Administrators.	Survey results	Additional community dialogue will provide opportunities to build understanding, share perceptions and receive feedback on resources and practices.
	2. Conduct focus groups for teachers, students and community members to solicit feedback on technology resources.	EOB →			Technology Services, Curriculum and Instruction, Building Administrators.	Reports from focus groups	
	3. Solicit targeted student, teacher, and community member's input on major technology decisions.	EOB →			Technology Services	Record of student, teacher and community participation in major technology decisions.	



<b>Technology Goal: Professional Development</b>							
<b>Tactic 1: Provide a variety of effective professional development options including workshops, coaching and online instruction for instructional staff.</b>							
<b>Status: There is a centralized and standardized orientation on essential resources for all staff. Currently we provide training at the beginning of someone's school year or work experience.</b>							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T1.1:</b> Increase proficiency among ACPS staff in using essential resources/systems (ie: student information system, email, online portal, network services).	1. Provide mandated orientation days for newly hired staff dedicated to hands-on training.	EOB	→		Technology Services, Human Resources, ALL	Documentation, agenda and feedback of orientation days	Information and professional development can be more efficiently delivered. Processes will eliminate duplicate efforts and provide coordinated. All instructional staff must receive initial professional development on our essential resources as well as continued training to maximize the use.
	2. Revise practices for providing ongoing hands-on training for current employees.	EOB	→		Technology Services, Human Resources, ALL	Identifiable plan of action	
	3. Provide all directions and training materials on Blackboard.	EOB	→		Technology Services	Published directory of centrally located directions and training materials	



<b>Technology Goal: Professional Development</b>							
<b>Tactic 1: Provide a variety of effective professional development options including workshops, coaching and online instruction for instructional staff.</b>							
<b>Status: Under guidance from the state, the role of the Instructional Technology Resource Teacher (TIS) has changed since the previous technology plan with a shift in focus from technical support to instructional integration and professional development. To reflect this shift, the position of Instructional Technology Resource Teacher has been changed to Technology Integration Specialist (TIS). Technology Service is supporting teachers and administrators as they continue to make this change. The number of embedded professional development offerings varies from school to school.</b>							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T1.2:</b> Increase embedded professional development opportunities for teachers within the school day.	1. Create and implement school-wide professional development plan through the coordination of the TIS with building administrators.  Integrate professional development opportunities with school-based professional development programs	EOB  →			Technology Integration Specialists, Building Administrators, Office of Staff Development, ACAT	School wide professional development plan for all buildings	Research shows that embedded staff development is most effective and comes in a variety of formats to meet immediate and individual needs. The primary responsibility of the Technology and Integration Specialists includes providing leadership, training and support for teachers, administrators and staff. With the increased use of technology among students and staff, so are the demands for training that address technology's impact on learning.
	2. Document school-based professional development offerings including individual, group, coaching, modeling and just-in-time training.	EOB  →			Technology Integration Specialists, Building Administrators, Office of Staff Development, ACAT	Documentation of staff development offerings, including data on increased teacher usage and student products	



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Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
	3. Structure individualized technology integration classes that focuses on professional goals, reflections, authentic products and online alternatives to face-to-face instruction.	EOB	→		Technology Integration Specialists, Building Administrators, Office of Staff Development	Documentation of individual school offerings that are aligned with stated actions, participant feedback, and instructor feedback	

<b>Technology Goal: Professional Development</b>							
<b>Tactic 1:</b> Provide a variety of effective professional development options including workshops, webinars, podcasts, coaching and online instruction for instructional staff.							
<b>Status:</b> The previous ACPS Tech Plan recognized the need for more opportunities for further learning and reflection on instructional practices. The following have been implemented to address those needs: Revised TIE, NETEST, and TLP (Descriptions of these programs are available in the appendix).							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T1.3:</b> Maintain professional development opportunities for teachers	1. Participation of teacher cohorts in ongoing study and research such as Action Research and Teacher Leadership projects.	EOB	→		Technology Integration Specialists, Building Administrators, Office of Staff	Documentation of staff development offerings, including data on increased teacher usage and student products	The National Council of Staff Development (NCSD) states the need for teachers to have opportunities for research, practice and reflection as well as time for the analysis of current and desired outcomes. Providing these



<b>Technology Goal:</b> Professional Development							
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Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
that extend the learning environment.					Development		opportunities is essential and requires coordination, recognition and, at times, compensation for these efforts. ACPS implemented the following to provide these opportunities:: Revised TIE, NETEST, and TLP (Descriptions of these programs are available in the appendix).
	2. Continue to evaluate and modify technology licensure program to not only include exposure to all ACPS resources and state requirements but also individualized professional goals, reflections, authentic products and online alternatives to face-to-face instruction.	EOB	→		Technology Integration Specialists, Building Administrators, Office of Staff Development	Document, participant feedback, products, and instructor feedback	
	3. Connect teacher and staff with online courses and webinars provided by outside organizations such as North Tier and PBS.	Funded by Regional NCLB Ed Tech Grant	→		Technology Integration Specialists, Building Administrators, Office of Staff Development	Documentation of courses taken	



<b>Technology Goal: Professional Development</b>							
<b>Tactic 1:</b> Provide a variety of effective professional development options including workshops, webinars, podcasts, coaching and online instruction for instructional staff.							
<b>Status:</b> We have developed programs that support teachers in identifying their learning goals in order to more directly impact their learning and teaching. In the past, these were offered on an individual basis but now are being offered in a more systematic manner.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T1.4:</b> Provide tiered learning opportunities for teachers in the area of instructional technology.	1. Delineate multiple levels of application for instructional technology resources.	EOB	→		Technology Services and ACAT	Published matrix	Teachers need guidance in selecting and prioritizing learning opportunities that are appropriate for their individual skills, as well as grade level/ content areas taught.
	2. Establish common goals and delivery methods for facilitators of professional development.	EOB	→		Technology Services	Published facilitator's guide	By identifying and providing professional development that builds upon Technology Services self, teachers participate in sustained learning that is focused on a higher goal.



<b>Technology Goal:</b> Professional Development							
<b>Tactic 2:</b> Maintain a program of instructional leadership that fosters effective use of technology in support of teaching and learning							
<b>Status:</b> Design professional development opportunities with department chairs/team leaders that focuses on content and collaboration.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T2.1:</b> Provide instructional leaders (administrators, directors, coaches, specialists) learning opportunities that identify effective practices.	1. Foster collaboration among instructional coaches and Technology Integration Specialists (TIS) through common training and planning sessions	EOB	→		Technology Services and Department of Curriculum and Instruction	Documentation of involvement with identified group	The leaders in the content areas must understand effective strategies that utilize technology resources. We cannot expect our teachers to grow in their practices without this leadership.
	2. Model use of instructional technology tools and resources in leadership meetings.	EOB	→		Technology Services, Department of Curriculum and Instruction	Document use of instructional technology tools and resources in leadership meetings	
	3. Participate in site Technology Services sponsored by the National School Board Association.		EOB	→	Technology Services, Office of Staff Development	Documentation of attendance and team reflection	
	4. Pilot technology integration leadership project for administrators.	EOB	→		Technology Services, Building Administrators	Document, participant feedback, products, and instructor feedback	



<b>Technology Goal:</b> Professional Development							
<b>Tactic 3:</b> Provide training for non-licensed personnel.							
<b>Status:</b> There is a centralized and standardized orientation on essential resources for all staff. Currently we provide training at the beginning of someone's school year or work experience. Follow up training is an area that needs to be improved.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T3.1:</b> Increase proficiency among ACPS non-licensed staff in using essential resources/systems (ie: student information system, email, online portal, network services).	1. Provide mandated orientation times for newly hired staff dedicated to hands-on training.	EOB →			Technology Services	Documentation, agenda and feedback of orientation days	Information and professional development can be more efficiently delivered. Centralizing processes will eliminate duplicate efforts and provide coordinated. All instructional staff must receive initial professional development on our essential resources as well as continued training to maximize the use.
	2. Revise practices for providing ongoing hands-on training for current employees.	EOB →			Technology Services	Identifiable plan of action	
	3. Provide all directions and training materials on Blackboard.	EOB →			Technology Services	Published directory of centrally located directions and training materials	



<b>Technology Goal: Professional Development</b>							
<b>Tactic 3: Provide training for non-licensed personnel.</b>							
<b>Status:</b> Staffing limitations have made it difficult to rotate Technology Services technicians into appropriate training or for Technology Services support staff to provide an extensive a menu of training offerings as is desirable							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T3.2:</b> Provide enhanced staff development for administrative, support and technical staff to ensure highest levels of competency.	1. Provide extensive training of Technology Services trainers in both training technique, and in content, to enhance support of all administrative systems.	EOB →			Technology Services	Training schedules, rosters, completion certificates	These actions are based upon a commitment to set aside the necessary blocks of time to provide the multiple levels of training required to implement this tactic.
	2. Ensure that hardware technicians stay current on all equipment deployed in ACPS.	EOB →			Technology Services	Training schedules, rosters, completion certificates	
	3. Provide extensive, multi-level training in all office productivity software supported by ACPS.	EOB →			Technology Services	Course list and descriptions, Training schedules, rosters, completion certificates	



<b>Technology Goal:</b> Professional Development							
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Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
	4. Ensure that all administrative system end users (new and current) are thoroughly trained in the use of their systems.	EOB →	→		Technology Services	Course list and descriptions, Training schedules, rosters, completion certificates	



<b>Technology Goal: Professional Development</b>							
<b>Tactic 4: Evaluate how professional development enhances and supports student learning.</b>							
<b>Status: Building level needs assessments should be coordinated by the TISs and Technology Integration Specialists. Division-wide needs assessments should be coordinated by Curriculum and Instruction. Feedback on professional development is provided through workshop evaluations.</b>							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T4.1:</b> Use data to inform and guide professional development programs.	1. Use student assessment data (test scores, feedback and products) to determine needs for school wide and content specific professional development plans.	EOB	→		Technology Services, TISs, Building Administrators, Curriculum Specialists	Annual revision of school wide and content specific professional development plans	It is essential that professional development is need-fulfilling and coordinated with the goals of individual schools and the division. Assessment data and feedback provides guidance on designing and prioritizing professional development.
	2. Use workshop evaluation data to determine needs for school wide and content specific professional development plans.	EOB	→		Technology Services, TISs, Building Administrators, Curriculum Specialists	Annual revision of school wide and content specific professional development plans	
	3. Use focus groups to provide feedback on professional development needs.	EOB	→		Technology Services, TISs, Building Administrators, Curriculum Specialists	Annual revision of school wide and content specific professional development plans	



<b>Technology Goal: Infrastructure</b>							
<b>Tactic 1: Build and maintain a technical architecture that provides a strong and scalable foundation in support of the goals of the division.</b>							
<b>Status:</b> ACPS provides a highly reliable, high speed, wired and wireless network to students, teachers, administrators, and support staff. Nevertheless, constantly increasing usage of the network requires regular infusions of bandwidth whenever possible. It is also necessary to substantially upgrade the network rooms at each of the ACPS facilities, as many of the equipment rooms were crafted in whatever space which was available when the facilities were wired, with little accommodation for environment factors.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>TL.1:</b> Maintain and update ACPS physical infrastructure (computer rooms, electrical plant and environmental systems) to keep pace with increasing demands.	1. Maintain policies and procedures for the acceptable use of the ACPS technology facilities.	EOB			Technology Services	Published acceptable use policy for technology facilities	The most frequent disruptions to network continuity are caused by environmental factors, especially electrical outages and inadequate air conditioning.  Maintaining a network the size and complexity of the ACPS backbone with a small staff of network specialists requires a continuing effort to increase centralized management of the infrastructure.
	2. Audit physical infrastructure to determine current and projected needs	EOB			Technology Services	Report from audit	
	3. Maintain a replenishment cycle for upgrading network hardware at all schools, gradually increasing reliability and access	EOB			Technology Services	Upgraded network hardware at schools	
	4. Continue to consolidate, centralize and virtualize servers to reduce cost and improve manageability of server based systems.	EOB	\$40,000	\$70,000	Technology Services	Virtualized servers; Improved manageability; reduced cost	
	5. Create a network test lab for evaluation of new technology	EOB	\$50,000		Technology Services	Network test lab installed	



<b>Technology Goal:</b> Infrastructure							
<b>Tactic 1:</b> Build and maintain a technical architecture that provides a strong and scalable foundation in support of the goals of the division.							
<b>Status:</b> ACPS uses a 100Mbps connection to the Internet via Allied Telecom (ISP). It is highly reliable and low cost.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T1.2:</b> Maintain Internet service that allows for appropriate speed and redundancy to meet the requirements for online learning, virtual classrooms, and high stakes testing.	1. Add Additional Internet capacity by adding a second connection.	EOB			Technology Services	Operational link to the Internet	Additional bandwidth is required just to handle current utilization.  A second pipeline is required to provide additional bandwidth and permit effective management of user load.
	2. Maintain speed of primary Internet access service to 100Mbps.	EOB			Technology Services	Operational-Critical link to the Internet	
	3. Add a secondary Internet access service of 100Mbps.			\$83,436	Technology Services	Operational link to the Internet	



<b>Technology Goal: Infrastructure</b>							
<b>Tactic 1: Build and maintain a technical architecture that provides a strong and scalable foundation in support of the goals of the division.</b>							
<b>Status: All schools have wireless networking deployed to cover all instructional areas. Office has wireless access in meeting areas, training rooms and the School Board meeting room.</b>							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T1.3:</b> Retro fit older wireless networks to increase speed and manageability	1. Maintain wireless connectivity throughout ACPS. Replace or upgrade as needed to maintain an operational level of connectivity for the students and staff	EOB	\$500,000	\$200,000	Technology Services	Wireless networking throughout schools	Now that wireless access has become ever present in ACPS. The goal has shifted from installation management and maintenance. Connectivity no longer being the main thrust, throughput and support for devices has moved to the forefront.



<b>Technology Goal:</b> Infrastructure							
<b>Tactic 1:</b> Build and maintain a technical architecture that provides a strong and scalable foundation in support of the goals of the division.							
<b>Status:</b> ACPS provides dial-in access to the school network and the Internet for all 9 <sup>th</sup> through 12 <sup>th</sup> graders. A higher speed, more flexible mode of access is desirable. Staff and K-8 students do not have this capability.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T1.4:</b> Continue to provide off-site access to the ACPS network for students and staff.	1. Continue providing dial-in service for all 9 <sup>th</sup> through 12 <sup>th</sup> grade students	EOB	→		Technology Services	Usage report	ACPS provides dial-in network/internet access for all student laptop users, providing Internet service to students who have no such access at home. Additionally, a tool to allow students to configure home wireless on the student laptop has been added to the laptop. Filtering continues to be necessary and with the addition of remote access has become critical. It is our responsibility to ensure that students using equipment which we provide to them as well as the ACPS network are protected to the extent that we can make possible. Advances in client-based filtering systems allow us to provide students and staff more options to access resources away
	2. Manage filters on student devices configured for off-site Internet access	EOB	→		Technology Services	Installation on student laptops;	
	3. Continue to expand availability of ACPS resources to off-site personnel via VPN and communication servers	\$36,000	\$36,000	\$36,000	Technology Services	Increased number of staff with off-site access	



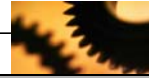
<b>Technology Goal: Infrastructure</b>							
<b>Tactic 2: Provide efficient and effective support for all instructional and administrative technology resources for students and staff.</b>							
<b>Status:</b> Technology Services continuously monitor resource allocation internally. Due to increased support demand, TS revised the support structure of technical support and deployment specialists to meet the needs of ACPS stakeholders.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T2.1.</b> Maintain an efficient and competent technical staff to support increasingly high levels of use of available resources.	1. Continue to provide technical staff with formal and informal training	EOB	→		Technology Services	Documentation of training	The demands for technical support have grown considerably over the last few years. From launching AAA (online access for parents and students to view attendance and grade information), there have been 5000 additional user accounts in the Student Information System. With the rollout of Employee Self-Service (ESS), there have been 3000 additional users in the financial system. These initiatives plus other technology tools and resources being available to staff have increased the number of help requests as depicted below:  Help Desk Email Messages Received: 7/1/10-6/2/11: 16,356 7/1/2007-6/30/2008: 11,417 7/1/2006-6/30/2007: 9,655  Tickets Opened: 7/1/10-6/1/11: 8,823 (should reach 9,500 by end of June, 2011.) 7/1/09-6/30/10: 8,017 7/1/08-6/30/09: 5,014 7/1/07-6/30/08: 4,478
	2. Continue to use our helpdesk management system, monitor and meet service levels and adjust training, procedures and staffing when appropriate.	EOB	→		Technology Services	Reports from Service Desk management system	
	3. Use a process approach to improve key technical support processes to increase productivity	EOB	→		Technology Services	Reports from Service Desk management system and results of TS Customer Satisfaction Survey.	
	4. Continue to conduct annual performance review of helpdesk	EOB			Technology Services	Reports from Service Desk management system	



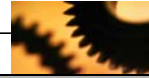
<b>Technology Goal:</b> Infrastructure							
<b>Tactic 2:</b> Provide efficient and effective support for all instructional and administrative technology resources for students and staff.							
<b>Status:</b> During 2009-2010, Technology Services support staff were reorganized to align with customer needs and improve communication to the end user.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
T. 2.2 Use a multifaceted approach to technical support throughout the system.	1. Maintain a serviceable number of technicians	EOB			Technology Services	Reports from Service Desk management system to make data driven decisions for staffing	A coordinated approach by TIS -school-based student and teacher leadership teams and technicians will provide a comprehensive system to address technical concerns from teachers and staff and improve communication to the end user. The result has been that teachers and staff can focus on their areas of expertise.
	2. Use school-based teacher technology leadership groups to provide additional support structure and decrease loss of instructional time	EOB	→		Technicians, TIS, Technology teacher leadership groups	Established groups	
	3. Improve customer service by using remote assistance tools.	EOB	→		Reports from Service Desk management system	Annual Survey	



<b>Technology Goal: Infrastructure</b>							
<b>Tactic 3: Ensure management systems operate effectively.</b>							
<b>Status:</b> Technology Services currently supports and upgrades systems purchased by other departments. During FY2009 and FY2010 Technology Services, Human Resources, Budget, and Finance participated in cross-functional teams surrounding new implementations. As a result procurement and implementation have been more effective and efficient than in past years.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T3.1.</b> Maintain applications to support Human Resources (HR), accounting, payroll, purchasing, student data, transportation, maintenance, special education, child nutrition, and student information.	1. Maintain hardware and software supporting administrative systems to support increasing demand	EOB	EOB	EOB	Technology Services is responsible for completing the upgrades and maintaining service. The respective departments are responsible for procuring the systems in coordination with Technology Services.	Documentation of technical architecture and maintenance	
	2. Acquire integrated business and technological solution that will support and streamline operations for human resources, payroll, benefits, budget and	EOB	→		Technology Services, HR, Finance Services	Project Plan	The 3DM Roadmap indicated the need for an integrated business system environment in phase 3. Existing systems did not provide optimal business solution necessary to run efficient and effective organization practices. Current systems had redundancy of tasks in addition to being paper-driven, labor intensive, and stove piped.



<b>Technology Goal: Infrastructure</b>							
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Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
	finance.						
	3. Implement an integrated business and technological solution that will support and streamline operations for human resources, payroll, benefits, budget and finance using a phased approach	EOB	→		Technology Services, HR, Finance Services	Project Plan and delivered functionality	
	4. Establish service level agreements between responsible departments and Technology Services to formalize expectations for support	EOB	→		Technology Services, HR, Finance, Transportation, Curriculum and Instruction, Food Services, Facilities	Documented service level agreements	



<b>Technology Goal: Infrastructure</b>							
<b>Tactic 3: Ensure management systems operate effectively.</b>							
<b>Status:</b> Technology Services currently supports and upgrades systems purchased by other departments. During FY2009 and FY2010 Technology Services, Human Resources, Budget, and Finance participated in cross-functional teams surrounding new implementations. As a result procurement and implementation have been more effective and efficient than in past years.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
	5. Retain hardware and software maintenance and support contracts	EOB	→		Technology Services, HR, Finance, Transportation, Curriculum and Instruction, Food Services, Facilities	Record of hardware and software maintenance contracts	
	6. Use hosted and managed applications to reduce load on financial resources	EOB	→		Technology Services, HR, Finance, Transportation, Curriculum and Instruction, Food Services, Facilities	Assess benefits and costs associated with outsourced web hosting	
	7. Provide annual assessment of management systems with regard to their effectiveness and support requirements.	EOB	EOB	EOB	Technology Services, HR, Finance, Transportation, Curriculum and Instruction, Food Services, Facilities	Completed assessment FY 2011	



<b>Technology Goal: Infrastructure</b>							
<b>Tactic 3: Ensure management systems operate effectively.</b>							
<b>Status:</b> During the FY2010 and 2011 school years ACPS implemented a new Student Information System (SIS). ACPS is in the beginning stages of implementing an Assessment Management System that will live on top of the SIS.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T3.2.</b> Provide a student information system that integrates applications and provides timely access to student data.	1. Maintain a new student information system that is centralized, provides web-accessibility and is compliant with state reporting and School Interoperability Framework (SIF).	EOB			Technology Services	SIS statistics and documentation	Data-driven decision making is the current standard process in ACPS. A dynamic SIS is essential to provide the foundational support needed to make key decisions. The addition of an Assessment Management System will allow real-time data to drive instruction while providing a platform for the Division to access the ACPS curriculum.  A maintenance program in cooperation with our SIS vendor will allow ACPS to ensure smooth transitions to new modules as well as a change management program..
	2. Integrate SIS with other applicable ACPS systems	EOB	→		Technology Services	Implementation Plan, Single sign-on capabilities	
	3. Provide training program for users based on their role in the division.	EOB	→		Technology Services, TISS, Curriculum & Instruction; Monitoring & Evaluation	Training plan, Training materials, participation statistics	
	4. Provide training through multiple venues, including face-to-face workshops, webinars, recorded material, and online resources.	EOB	→		Technology Services	Training schedule, user feedback, materials created.	



<b>Technology Goal: Infrastructure</b>							
<b>Tactic 4: Monitor policies, procedures and technologies to ensure that computing resources are secure and recoverable.</b>							
<b>Status: ACPS continues to monitor the network to prevent unauthorized physical access. ACPS owns and maintains a content filter and firewall to control access to material that is harmful to our students and detrimental to our system. Manual validation ensures the system is working properly.</b>							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T4.1:</b> Use security monitoring tools to help ensure reliability and availability of ACPS resources.	1. Authenticate access to ACPS network	EOB	\$40,000	\$40,000	Technology Services	Document procedures and deploy current and future technologies for security.	ACPS is challenged by the need to provide access and the requirements to secure that access. Visitors frequent ACPS facilities and there must be a mechanism in place to validate physical access to our system.  In accordance with the ACPS Internet Safety Plan and federal law (Children's Internet Protection Act (CIPA), ACPS filters Internet access for all ACPS computers.
	2. Renew licenses for Internet content filtering, email content filtering and virus protection and Firewall	EOB	→		Technology Services		
	3. Continue to use manual and automated content monitoring to evaluate effectiveness of security tool set	EOB	→		Technology Services		
	4. Continually review security as a part of normal operation	EOB	→		Technology Services		



<b>Technology Goal: Infrastructure</b>							
<b>Tactic 4: Monitor policies, procedures and technologies to ensure that computing resources are secure and recoverable.</b>							
<b>Status:</b> All students and staff currently sign an Acceptable Use Policy. Staff sign this policy when they are hired. High school students sign this form annually. There is no formal process for annual review of the AUP for staff or students.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T4.2:</b> Maintain Acceptable Use Policies (AUP) with staff and students that includes an Internet Safety Component aligned with the Virginia Department of Education's <i>Guidelines and Resources for Internet Safety in Schools</i> document.	1. Continue to review, revise and publish an AUP	EOB	→		Internet Safety Committee	Revised AUP; School Board approval	This policy is designed to keep the ACPS systems robust and reliable. Students and staff need to see the connection between violations of the AUP and potential technical problems on individual devices, school networks and division applications. In addition, students and staff need to see the connection between violations of the AUP potential impact on student safety including but not limited to social networking and cyber bullying.
	2. Post AUPs on school grounds and web-based systems	EOB	→		Internet Safety Committee	Posted AUPs	
	3. Communicate AUP updates to staff every August	EOB	→		Internet Safety Committee, TISs	Documentation of communication	
	4. Provide new employees with a thorough description of the AUP agreement	EOB	→		Internet Safety Committee, TISs, HR	New teacher processing requirements	
	5. Review AUPs with students as part of the Internet Safety program.	EOB	→		TISs, teacher and student technology leaders	Internet Safety Program Plan	



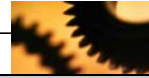
<b>Technology Goal:</b> Infrastructure							
<b>Tactic 4:</b> Ensure ACPS administrative systems operate effectively.							
<b>Status:</b> Data requirements continue to grow as well as demands for this data. ACPS maintains storage facilities and data backup in order to meet these growing demands.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T4.3:</b> Provide a comprehensive business continuity program	1. Continue to expand backup capabilities to keep pace with growth in storage requirements and network activity	EOB	EOB	\$78,000	Technology Services	Backup and recovery schematic and procedures	Storage requirements on the ACPS network are growing exponentially, and backup windows continue to shrink. It will be necessary to expand backup capabilities annually.
	2. Continue to expand storage capabilities to keep pace with the demands of users and applications	EOB	\$140,000	\$70,000	Technology Services	Maintain storage system that can absorb sudden increase in demand.	



<b>Technology Goal: Infrastructure</b>							
<b>Tactic 5: Maintain office productivity software and systems for communication and collaboration throughout the division.</b>							
<b>Status: Technology Services currently supports more than 3000 e-mail accounts for staff and an additional 3000 accounts for students.</b>							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T5.1:</b> Maintain an enterprise email and calendaring system that is compliant with mobile devices and has a web interface.	1. Maintain the ACPS enterprise email and calendaring system	EOB	→		Technology Services	File Requests and visitors to the site	Maintain the division's Enterprise collaboration suite by instituting standard change management practices as well as continued support on the use of the tool which includes employee training.
	2. Maintain training opportunities for all ACPS employees	EOB	→		Technology Services, TISs	Implementation plan	
<b>T5.2:</b> Maintain office productivity operating system platform and software.	1. Develop Project and deployment plan	EOB	\$435,049		Technology Services	Project plan	Rollout new versions of operating system platform and office productivity to provide new features and functionality to ACPS stakeholders
	2. Build migration tools and testing	EOB	\$11,583		Technology Services	Migration plan	
	3. Conduct Professional Development and training	EOB	\$187,864		Technology Services	Training plan	
	4. Deploy Windows 7 and Office 2010	EOB	\$215,094		Technology Services	Deployment metrics	



<b>Technology Goal: Infrastructure</b>							
<b>Tactic 5: Maintain systems for communication and collaboration throughout the division.</b>							
<b>Status:</b> ACPS maintains a web presence that requires updating to continue to be an effective means of communication. In September 2008, ACPS began using electronic meeting management and live streaming of board meetings.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
<b>T5.3:</b> Utilize web presence to communicate ACPS activities, news and information.	1. Maintain servers and applications	EOB	\$27,000	\$17,000	Technology Services	Documentation of technical architecture and maintenance	Provide more options for open communication between the school system and the public.
	2. Provide access to other web-based administrative systems such as Blackboard and student information system	EOB	→		Technology Services	Access to additional systems provided through ACPS website.	
	3. Use the Electronic School Board application to provide access to archived school board meetings and documents	EOB	→		Technology Services	School Board documents and past meetings accessible through ACPS webpage.	
	4. Use Granicus to provide access to live and archived school board meetings	EOB	→		Technology Services, Information & Outreach	Live School Board meetings available through ACPS webpage	
	5. Use video conferencing to reduce travel time and expense	EOB	\$20,000	\$20,000	Technology Services	Accessibility to video conferencing tools; documentation of use	
<b>T5.4:</b> Maintain ACPS website	1. Incorporate feedback from targeted audiences (parents, students, teachers, staff,	EOB	→		Technology Services	Survey, web stats	The purpose of the website redesign is to modernize the ACPS web presence (www.acps.k12.va.us) and respond to increased demands

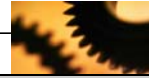


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Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
	community) via focus groups						for digital content. The last redesign was completed in 2007.
	2. Improve navigation, search functionality and user experience	EOB	→		Technology Services	Survey, web stats	
	3. Enhance functionality and use of multimedia	EOB	→		Technology Services	Survey, web stats	
	4. Deliver information based on topic rather than organizational structure	EOB	→		Technology Services	Survey, web stats	
	5. Design mobile interfaces	EOB	→		Technology Services	Survey, web stats	
	6. Establish superintendent/board approved policies for web publishing and social media sites	EOB	→		Technology Services	Survey, web stats	



<b>Technology Goal: Infrastructure</b>							
<b>Tactic 5:</b> Maintain systems for communication and collaboration throughout the division.							
<b>Status:</b> ACPS has phone and voicemail systems in all administrative and instructional spaces. Dependency on cellular phone services continues to grow.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
T5.5 Maintain and support telecommunications throughout the division	1. Evaluate phone systems	EOB	→		Technology Services, Facilities	Documentation of age and services performed on phone and voice mail systems	Phone and voicemail systems range in age and capabilities. Service required for aging systems is costly. Options need to be explored for better service and cost reduction.  Continue to revise and publish, allocations, usage guidelines, and billing for telecommunication devices.
	2. Make recommendations for enhancements or replacements as necessary	EOB	→		Technology Services	RFP	

<b>Technology Goal: Data</b>							
<b>Tactic 1:</b> Implement governance structure to manage and monitor IT investments							
<b>Status:</b> ACPS developed the ACPS Data-Driven Decision Making Governance Group (3DMGG), which has representation from throughout the district and will provide the governance structure to manage and approve IT investments in the district. The 3DMGG has implemented a project request process to determine whether IT investment request align with strategic goals. This group managed the RFP process and acquired an Assessment Management System during the 2010 school year.							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
T1.1 Maintain Data-Driven Decision Making Governance	1. Establish Project Charter indicating membership and roles and responsibilities	EOB	→		Central Office	Coordinated and Signed Project Charter	The 3DM needs assessment highlighted the need for a governance structure to manage and approve IT investments in the district.



<b>Technology Goal: Data</b>							
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Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
Group	2. Organize and discuss enterprise-wide issues and initiatives	EOB	→	→		Meeting Schedule	
T 1.2 Develop Standard Project Request Process	1. Coordinate and implement standard IT project request and approval process	EOB	→	→	Central Office	Coordinated and approved Process	The 3DM needs assessment highlighted the need for a governance structure to manage and approve IT investments in the district.



<b>Technology Goal: Data</b>								
<b>Tactic 2: Increase data accessibility and data quality</b>								
<b>Status: Trained district on new Student Information System. Identified data entry process improvement areas and knowledge gaps of data entry personnel.</b>								
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale	
		FY 12	FY 13	FY 14				
T2.1 Conduct analysis of data entry processes	1. Analyze AS-IS data entry processes executed by the Registrars and develop the TO-BE process	EOB	→		Technology Services	Standard enrollment, transfer, and withdrawal process	The 3DM needs assessment highlighted the need to enhance the Registrar position and standardize data entry processes to increase data quality.	
	2. Analyze current Registrar position description and develop TO-BE position description	EOB	→		Technology Services	Standard position description		
	3. Request Compensation study based on new position description	EOB	→		Technology Services, HR	Salary Survey		If compensation study shows the need to adjust salary, this would impact FY13 budget
	4. Launch Registrar User Group to use standard processes	EOB	→		Technology Services	Meetings		The 3DM needs assessment highlighted the need to enhance the Registrar position and standardize data entry processes to increase data quality.
T 2.2 Conduct Re-registration process	1. Verify and update all contact information for rising 3 <sup>rd</sup> , 6 <sup>th</sup> , and 9 <sup>th</sup> graders	EOB	→		Technology Services and MOE coordinator	Number of parents confirmed	The 3DM needs assessment highlighted the need to increase the quality of student contact information. Re-registration of students will provide the ability to update existing information.	



<b>Technology Goal: Data</b>							
<b>Tactic 3: Enhance and implement systems and analysis tools</b>							
<b>Status:</b> Upgraded the Student Information System to address accessibility and usability concerns highlighted during 2009 school year. Deployed ACPS Academic Access which is new online service that connects middle and high school parents and families to the tools they need to help their students' succeed. These parents are able to access student grades, schedule and attendance information. Acquired an assessment management system which enables teachers to identify and address student improvement areas							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
T3.1 Customize monitor and maintain Student Information System	1. Upgrade software with new builds	EOB	→		Technology Services	Build schedule	ACPS upgraded the SIS during the 2010-2011 school year due to accessibility and usability concerns from stakeholders.
	2. Refine and update user roles to allow access to data	EOB	→		Technology Services	Annual Technology Services Survey	
	3. Customize software to fit ACPS business model	EOB	→		Technology Services	Annual Technology Services Survey	
	4. Communicate and train on new features	EOB	→		Technology Services	Annual Technology Services Survey	
T 3.2 Provide parents and families online access to student's grade, attendance, and schedule information	1. Create account and provide access to secondary parents	EOB	→		Technology Services	Number of parents and students accessing the system	Parents and students have requested online access to attendance and grade information for many years. This was successfully delivered to secondary parents and students during the 2010-2011 school year.



<b>Technology Goal:</b> Data							
<b>Tactic 3:</b> Enhance and implement systems and analysis tools							
<b>Status:</b> Upgraded the Student Information System to address accessibility and usability concerns highlighted during 2009 school year. Deployed ACPS Academic Access which is new online service that connects middle and high school parents and families to the tools they need to help their students' succeed. These parents are able to access student grades, schedule and attendance information. Acquired an assessment management system which enables teachers to identify and address student improvement areas							
Subtactics	Action	Timeline & Approximate Costs			Responsible Departments	Progress Measures	Rationale
		FY 12	FY 13	FY 14			
T 3.3 Develop Assessment Management System	1. Configure system to include ACPS curriculum	EOB	\$90,000	\$90,000	Curriculum and Instruction	Percentage of curriculum incorporated in the system	The 3DM needs assessment highlighted the need for an assessment management system to be used to implement and assess based on the revised ACPS curriculum.
	2. Launch system pilot	EOB	→		Curriculum and Instruction and Accountability and Technology Services	Survey	
	3. Provide training and outreach	EOB	→		Curriculum and Instruction and Accountability and Technology Services	Survey	



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## Appendix 2: Division AUP

### ACCEPTABLE COMPUTER SYSTEM USE

The School Board provides a computer system, including the internet, to promote educational excellence by facilitating resource sharing, innovation and communication. The term computer system includes hardware, software, data, communication lines and devices, terminals, printers, CD-ROM devices, tape drivers, servers, mainframe and personal computers, the internet and other internal and external networks.

All use of the ACPS computer system must be (1) in support of education and/or research, or

(2) for legitimate school business. Use of the computer system is a privilege, not a right. Use of the privilege should not be abused in the amount of time used, type of use or content. Any individual who uses the ACPS computer system has no expectation of privacy regarding that use. ACPS expressly reserves the right to monitor all computer use activity. Any communication or material used on the computer system, including without limitation, electronic mail or other files, created, sent or deleted from an ACPS computer/user's account, may be monitored and/or read by school officials.

In accordance with Virginia Code 22.1-70.2, the Alexandria City Public Schools trains students to use best practices in internet safety. Beginning in the 2008-2009 school year Internet Safety must be taught to and practiced by all students in grades K through 12. The Superintendent shall establish administrative procedures, for the School Board's approval, containing the appropriate uses, ethics, and protocol for the computer system.

The procedures 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 illegal materials, as described below, via the Internet;
- (2) provisions, including the selection and operation of a technology protection measure for the division's computers having Internet access to filter or block Internet access through such computers, that seek to prevent access to;
  - (a) child pornography as set out in Va. Code § 18.2-374.1:1 or as defined in 18 U.S.C. § 2256;
  - (b) obscenity as defined by Va. Code § 18.2-372 or 18 U.S.C. § 1460; and
  - (c) material that the school division deems to be harmful to juveniles as defined in Va. 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) provisions establishing that the technology protection measure is enforced during any use of ACPS's computers by minors;
- (4) provisions establishing that online activities of minors will be monitored;
- (5) provisions designed to protect the safety and security of minors when using electronic mail, chat rooms, and other forms of direct electronic communications;

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(6) provisions designed to prevent unauthorized online access by minors, including “hacking” and other unlawful activities by minors online; and

(7) provisions prohibiting the unauthorized disclosure, use, and dissemination of personal information regarding minors.



Use of the ACPS computer system shall be consistent with the educational or instructional mission or administrative function of ACPS as well as the varied instructional needs, learning styles, abilities and developmental levels of students. The ACPS computer system is not a public forum. Each teacher, administrator, student and parent/guardian of each student shall sign the acceptable Computer Use Agreement, IIBEA-E2, before using the ACPS computer system. The failure of any student, teacher or administrator to follow the terms of the Agreement, this policy or accompanying regulation may result in loss of computer system privileges, disciplinary action, and/or appropriate legal action. The School Board is not responsible for any information that may be lost, damaged or unavailable when using the computer system or for any information retrieved via the Internet.

Furthermore, the School Board will not be responsible for any unauthorized charges or fees resulting from access to the computer system. The Superintendent shall submit to the Virginia Department of Education this policy and accompanying regulation biennially.

Adopted: October 4, 2001

Amended: July 1, 2005

Amended: May 18, 2006

Amended: September 20, 2007

Legal Refs: Code of Virginia, 1950, as amended, §§ 18.2-372, 18.2-374.1:1, 18.2-390, 22.1-70.2, and 22.1-78., 18 U.S.C. §§ 1460, and 47 U.S.C. § 254.

All use of the Alexandria City School Division’s computer system shall be consistent with the School Board’s goal of promoting educational excellence by facilitating resource sharing, innovation and communication. The term computer system includes hardware, software, data, communication lines and devices, terminals, printers, CD-ROM devices, tape drives, servers, mainframe and personal computers, the Internet and any other internal or external network.

**Computer System Use Terms and Conditions:**

1. **Acceptable Use.** Access to the Division’s computer system shall be (1) for the purposes of education or research and be consistent with the educational objectives of the Division or (2) for legitimate school business.
2. **Privilege.** The use of the Division’s computer system is a privilege, not a right.
3. **Unacceptable Use.** Each user is responsible for his or her actions on the computer system. Prohibited conduct includes:
  - using the network for any illegal activity, including violation of copyright or other contracts, or transmitting any material in violation of any federal, state or local law.



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- sending, receiving, viewing, or downloading unauthorized material via the computer system.
  - downloading of unauthorized software.
  - downloading copyrighted material for unauthorized use.
  - using the computer system for private financial or commercial gain.
  - using resources, to include file space, in a wasteful manner.
  - gaining unauthorized access to resources or entities.
  - posting material authorized or created by another without his or her consent.
  - using the computer system for commercial or private advertising.
  - submitting, posting, publishing or displaying any obscene, profane, threatening, illegal or other inappropriate material.
  - using the computer system while access privileges are suspended or revoked.
  - vandalizing the computer system, including destroying data by creating or spreading viruses or by other means.

4. **Electronic Mail.** ACPS owns and controls the ACPS electronic mail system. ACPS may provide electronic mail to aid students and staff in fulfilling their duties and as an education tool. Electronic mail is not private. Students' electronic mail will be monitored. The electronic mail of staff may be monitored and accessed. Unauthorized access to an electronic mail account by any student or employee is prohibited. Users shall be held personally liable for the content of any electronic message they create. Downloading any file attached to an electronic message is prohibited unless the user is certain of that message's authenticity and the nature of the file.

5. **Network Etiquette.** ACPS expects each user to abide by generally accepted rules of etiquette, including the following:

- Users shall be polite and use appropriate language in all communications.
- Users shall not forge, intercept or interfere with electronic mail messages.
- Users are prohibited from using obscene, lewd, profane, threatening or disrespectful language
- Users shall not post personal contact information, including names, home, school or work addresses, telephone numbers, or photographs, about themselves or others.
- Users shall respect the computer system's resource limits.
- Users shall not post chain letters or download large files.
- Users shall not use the computer system to disrupt others.
- Users shall not read, modify or delete data owned by others.

6. **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 denies any responsibility 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 these procedures.

7. **Security.** Computer system security is a high priority for the school division. If any user identifies a security problem, the user shall notify the building principal or system administrator immediately. All users shall keep their passwords confidential and shall follow



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computer virus protection procedures.

**8. Due Diligence in Care of Computer Equipment.** ACPS expects all users of ACPS computer equipment to make every effort to afford the equipment with proper care and security. In the case of portable equipment or equipment assigned to individuals for use off-site or at home, the user must accept personal responsibility for said equipment, and must accept the risk of theft, loss, or damage due to negligence.

**9. Vandalism.** Intentional destruction of any part of the computer system through creating or downloading computer viruses or by any other means is prohibited.

**10. Charges.** The School Division assumes no responsibility for any unauthorized charges or fees as a result of using the computer system, including telephone or long distance charges.

**11. Internet Safety.** In accordance with Virginia Code 22.1-70.2, the Alexandria City Public Schools trains students to use best practices in internet safety. Beginning in the 2008-2009 school year Internet Safety must be taught to and practiced by all students in grades K through 12.

**12. Enforcement.** ACPS will install software on ACPS computers having Internet access to filter or block Internet access through such computers to child pornography and obscenity. The online activities of minors may also be monitored manually. **Any violation of these regulations shall result in loss of computer system privileges and may also result in appropriate disciplinary action, as determined by School Board policy, or legal action.**

Adopted: October 4, 2001

Revised: July 1, 2005

Revised: May 18, 2006

Revised: September 20, 2007

Legal Refs.: Code of Virginia, 1950, as amended, § 18.2-372, 18.2-374.1:1, 18.2-390, 22.1-70.2 and 22.1-78.

18 U.S.C. §§ 1460, 2256

47 U.S.C. § 254

Cross Refs: JFC Student Conduct

JFC-R Standards of Student Conduct

**Each employee must sign this Agreement as a condition for using the School Division's computer system. Each student and his or her parent/guardian must sign this Agreement before being granted use of the School Division's computer system. Read this agreement carefully before signing.**

Prior to signing this Agreement, read policy and regulations GAB/IIBEA, Acceptable Computer System Use. If you have any question about this policy or regulation, contact your supervisor or your student's principal.

I understand and agree to abide by the School Division's Acceptable Computer System Use

Policy and Regulation. I understand that the School Division may access and monitor my use of the computer system, including my use of the internet, e-mail and download




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material, without prior notice to me. I further understand that should I violate the Acceptable Use Policy or Regulation, my computer system privileges may be revoked and disciplinary action and/or legal action may be taken against me.

Student/Employee Signature \_\_\_\_\_

Date \_\_\_\_\_

I have read this Agreement and Policy and Regulation GAB/IIBEA. I understand that access to the computer system is intended for educational purposes and the Alexandria City School

Division has taken precautions to eliminate inappropriate material. I also recognize, however, that it is impossible for the School Division to restrict access to all inappropriate material and I will not hold the School Division responsible for information acquired on the computer system.

I have discussed the terms of this agreement, policy and regulation with my student. I grant permission for my student to use the computer system and for the School Division to issue an account for my student.

Parent/Guardian Signature \_\_\_\_\_ Date \_\_\_\_\_

Parent/Guardian Name \_\_\_\_\_ Date \_\_\_\_\_

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## Appendix 3: Summary of Internet safety program



### Alexandria City Public Schools Internet Safety Program

Internet safety is taken seriously in Alexandria City Public Schools. Parents should reasonably expect that students in ACPS are afforded the tremendous educational benefits of the Internet in a safe environment. As stated in the ACPS Acceptable Use Policy (AUP), "In accordance with Va. Code § 22.1-70.2, Alexandria City Public Schools requires all students to receive Internet safety training. This document outlines the ACPS Internet Safety Program.

#### **Overview**

The Internet provides students with access to a wealth of information and educational resources along with the opportunity for collaboration with other students around the world. Unfortunately, it also offers inappropriate content and the opportunities for interaction with persons with intent to cause harm. We believe that the benefits outweigh the disadvantages; however, it is critical that we work together to provide a safe environment and teach children ways to protect themselves while on the Internet.

The Virginia General Assembly passed legislation in 2006 requiring school divisions to integrate a component of Internet safety within the instructional program. Beginning in the 2007-2008 school year, Alexandria City Public Schools established an Internet safety program to ensure compliance with Va. Code § 22.1-70.2.

#### **Program Components**


Alexandria City Public Schools is proud to participate in a partnership with *NetSmartz*, an affiliate of the National Center for Missing and Exploited Children, located in Alexandria. Several ACPS teachers, staff members and students have collaborated with *NetSmartz*, to design interactive curriculum materials for educators, parents and students in the area of Internet safety. *NetSmartz* materials are in integral part of the division's instruction for students, staff and the community.

#### *Training for staff*

- Internet safety sessions are offered through school-based staff meetings and professional development days.
- Digital Citizenry is addressed in the ACPS Technology Integration Education class for all new teachers

#### *Instruction for students*

- *NetSmartz* curriculum is integrated into the Character Counts program in the elementary schools.

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- 
- Internet Safety public service announcements are incorporated in schools morning television programs.
  - Elementary student workstations have NetSmartz desktops and screen savers.
  - *Nettrekker*, an educational search engine that ensures safe, age-appropriate and academically relevant information, is provided for all students and teachers.
  - Technology Integration Specialists (TIS) partner with teachers to provide lessons at a variety of grade levels.
  - Internet Safety is a part of all computer lab orientations.
  - *Internet Safety Information* website offers link to fun resources to help students learn about Internet safety
  - Secondary student laptop orientation included an introduction to the Internet safety curriculum for teens and ‘tweens.
  - Internet Safety resources are offered to middle and high school students through Blackboard.

#### *Filter for Internet access*

- Access to the Internet is filtered for content that is obscene, depicts pornography, is harmful to minors, or is deemed inappropriate for minors.
- Overrides to the filter are not available.
- Internet use is monitored by teachers at all grade levels.

#### *Security of data on ACPS network*

- No unfiltered access to the Internet is allowed.
- A firewall is in place to prevent inappropriate access to ACPS data.
- Anti-spam and anti-virus software are in place.
- Network is monitored.

#### *Presentations for parents and community members*

- Internet safety presentations are offered through PTA meetings
- *ACPS Internet Safety* website offer links to information and resources for parents.  
<http://www.acps.k12.va.us/curriculum/technology/safety.php>

#### *Policy and agreements for appropriate use of the Internet and networked resources by students and staff*

- ACPS Computer Use System Policy and Agreement- IIBEA-R; IIBEA-E2
- ACPS High School Notebook Computers and Email - Agreement for Use

### **Roles and Responsibilities of ACPS Community**

All roles and responsibilities will be reviewed annually as part of the overall evaluation of the program. Roles and responsibilities will be updated as needed to promote student safety.



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*Administrators:*

- Enforce AUP and adhere to discipline guidelines in the Student Code of Conduct and AUP
- Respond to any cyberbullying claims
- Be knowledgeable about Internet safety, stay current
- Make sure teachers are monitoring students' use of school computers and other technologies, and covering Internet safety skills in their lessons as needed
- Seek input from staff and community regarding filtering

*Teachers:*

- Be familiar with and report all claims of cyberbullying
- Monitor student Internet and other computer/technology use
- Report AUP violations to administrators
- Include Internet safety concepts into taught curriculum and when using technology with students
- Be familiar with provisions of and monitor for violations of copyright and ethics standards as regards to the use of technology and the Internet

*Technology Integration Specialists:*

- Be familiar with different forms of cyberbullying and report all claims of cyberbullying involving ACPS provide equipment.
- Train instructional staff on Internet safety concepts
- Train teachers on proper monitoring of students
- Reinforce Internet safety concepts in computer clubs and other opportunities when working with students
- Provide resources to teachers and community members on Internet safety
- Train teachers in the use of class laptop monitoring software

*Library Media Specialists:*

- Be familiar with and report all claims of cyberbullying
- Reinforce Internet safety during library orientations
- Monitor student Internet and other computer/technology use in the library
- Train teachers and students on copyright standards

*School Counselors:*

- Integrate Internet safety into current curriculum
- Be familiar with and report all claims of cyberbullying
- Offer additional resources to students, parents and teachers on Internet safety and cyberbullying



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*Technology Services Staff:*

- Monitor network and Internet at administrators' direction
- Report any potential AUP violations to administration
- Maintain filtering technology for all Internet traffic
- Provide Internet safety concepts to all teachers and instructional staff
- Provide training as necessary to administrators and technical staff
- Serve as a liaison between VDOE and the division
- Evaluate effectiveness of Internet Safety Program and implement any needed adjustments/modifications/trainings as determined to be necessary for program success
- Provide teachers with software to monitor student computer activity

### **Updates and Revisions of the Internet Safety Program**

The Department of Technology Services, with the assistance of the Internet Safety Committee, will review the Acceptable Use Policy and Internet Safety Program as part of the annual assessment of the ACPS Technology Plan.

This assessment will include:

- Review of individual roles and responsibilities as pertains to this program;
- Review of trends for numbers and severity of AUP violations;
- Review data for security violations to determine what, if any, modifications are required to the current program and policy;
- Review current VDOE guidelines and state legislation against current program to ensure consistency;
- Review of sample population student assessment results

As a result of this assessment, The Department of Technology Services will determine the need for program/policy changes. If changes to policy are necessary, documents will be updated for school board approval so that they are in place prior to the start of the next school year.



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## Appendix 4 - Data Driven Decision Making (3DM) Needs Assessment Summary

### ***Executive Summary***

Alexandria City Public Schools (ACPS) was the recipient of an *Enhancing Education Through Technology (EET)* federal grant. ACPS is leveraging this grant to implement a capacity building initiative to facilitate data-driven decision making by teachers, principals, and administrators. The outcome of this initiative, entitled the Data Driven Decision Making (3DM) Initiative, is expected to enhance technology connectivity and enable students and parents can more effectively access student academic progress, school data, and academic resources.

The goals of the 3DM initiative are coordinated with the Federal No Child Left Behind (NCLB) Title II D goals and are aligned with the ACPS Strategic Plan. These goals are as follows:

1. Improve student achievement through technology use in elementary and secondary schools.
2. Ensure that every student is technology literate by the time he or she finishes the eighth grade, regardless of race, ethnicity, gender, family income, geographic location, or disability.
3. Encourage the effective integration of technology resources and systems with teacher training, professional development, and curriculum development to establish research-based instructional methods that can be implemented widely as best practices.

In efforts to inform the decision-making process and prioritize the tasks associated with the grant, ACPS partnered with Excella Consulting to develop a comprehensive needs assessment to determine “What needs to be in place to put meaningful data in the hands of those who can affect student achievement.” Through surveys and focus group interviews, needs were identified, documented, and organized in a needs inventory to provide a central location for ACPS. The focus groups emphasized that providing tools and data to teachers will increase student achievement most significantly. By increasing the quality of classroom data, the quality of actionable data for Principals, Central Office, and the Superintendent also will increase.

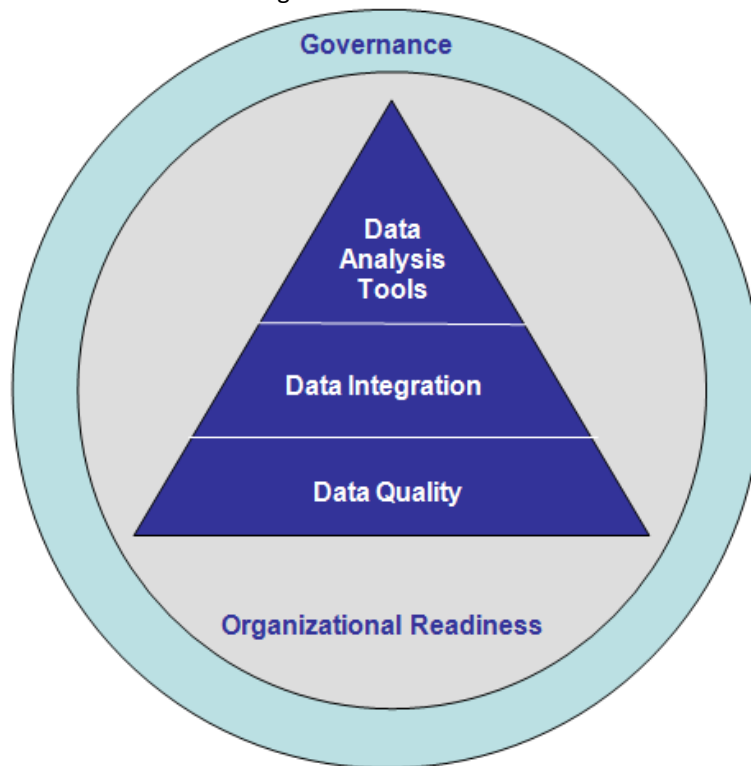
A 3DM roadmap was developed to address the needs that will increase student achievement most significantly. The needs inventory and roadmap will provide the mechanisms to evaluate and prioritize needs throughout the 3DM initiative.



### **3DM Initiative Framework**

The following Data-Driven Decision Making Framework (3DMF) model provided the construct for categorizing and prioritizing the needs across ACPS. The model illustrates that data quality is the foundation for data-driven decision making. Without reliable and timely data, all other efforts will be unsuccessful.

Figure 1 –3DMF - Focus is placed on data quality, data integration, data analysis tools, governance, and organizational readiness



The framework focuses on five key areas as follows:

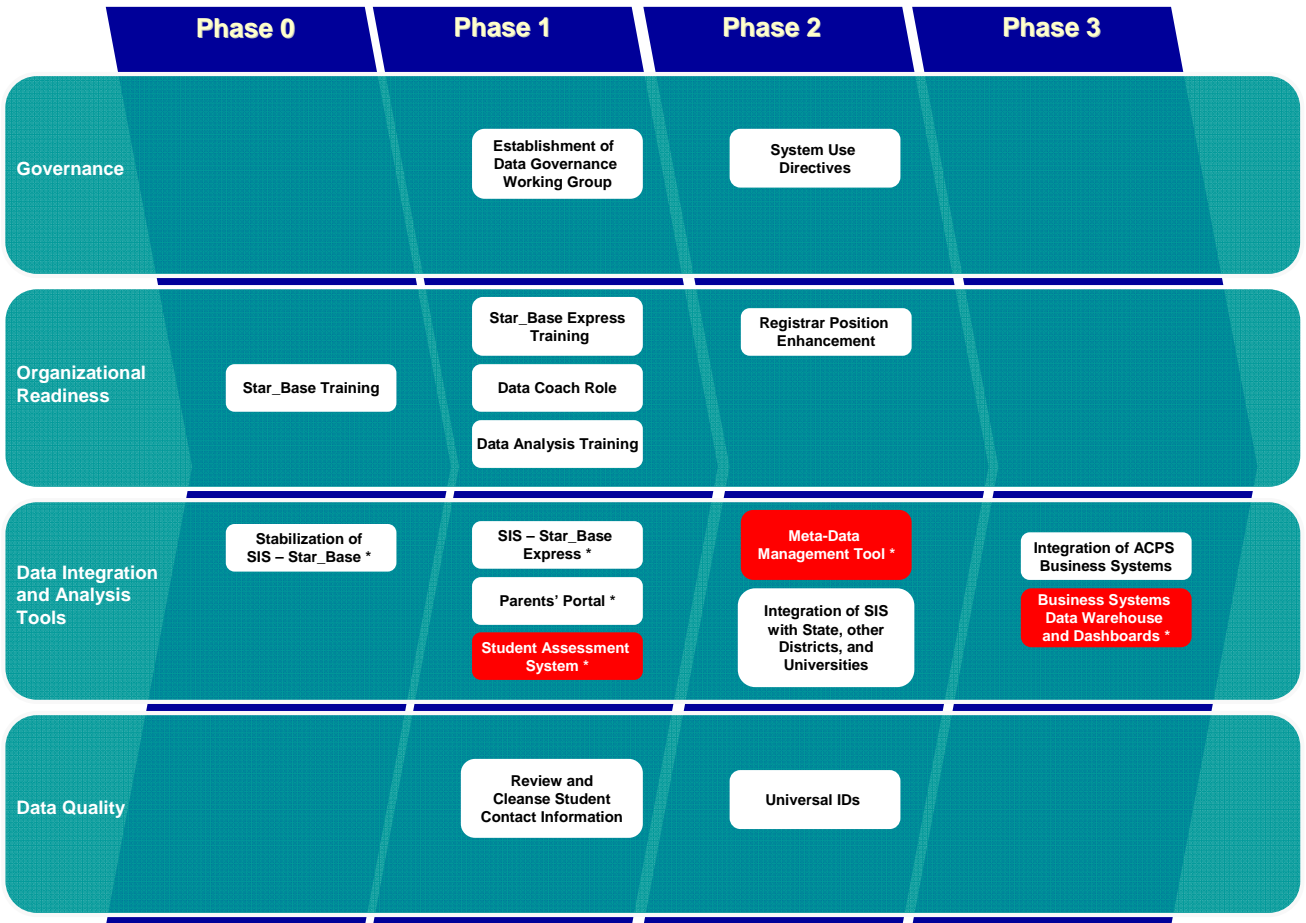
- **Governance** - Overall management of the availability, usability, integrity, and security of the data employed in an enterprise
- **Organizational Readiness** –ACPS’ state of preparedness to change and adapt to needs of the future
- **Data Quality** – Reliability and effectiveness of data
- **Data Integration** - Combination of data residing in different sources
- **Data Analysis Tools** - Technology and systems that will aggregate data for users to analyze



## 3DM Initiative Roadmap

The roadmap for the 3DM initiative can be visualized using the graphic shown below. Phases 0 and 1 include solutions that impact teachers the most significantly with the subsequent phases focused more on building the 3DM capabilities for the organization as a whole.

Figure 2 – The 3DM Initiative has four phases which develops the infrastructure to support the key elements of the 3DMF as described above



\* Includes the following: Install/Configure System, User account creation and administration, Establishment of standard reports/Dashboards, Data migration/conversion, Testing, Communications Strategy Development, Training Materials Development, and User Training

  Indicates procurement action is required

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## Appendix 5 -Technology Services Questionnaire Statistics



### **Purpose**

The TS questionnaire is part of the ACPS Strategic Planning Initiative, a district-wide effort to improve processes across our school system. In January 2011 the ACPS Department of Technology Services began the strategic planning process with a kick-off meeting with consultant Brenda Clark. A group of 10 TS staff were selected to form the Technology Services Process Implementation Working Group (working group).

The purpose of the TS questionnaire was to seek ACPS employee feedback about the quality of services Technology Services provides and to provide valuable input to the working group regarding how to prioritize the key processes for improvement.

Results will also help Technology Services measure current performance and plan for the future.

### **Questionnaire Administration**

All ACPS employees were invited via e-mail to participate in the 25 question anonymous online TS questionnaire on March 17, 2011. An announcement was also posted in Blackboard and many TS employees included the link to the TS questionnaire in their e-mail signature. Several reminder e-mails were sent to employees and the questionnaire was open for responses until March 30, 2011.

The 25 questions included 24 selected response questions and one open-ended question which provided the opportunity for respondents to share their suggestions.

### **Questionnaire Results**

The questionnaire results provide insight into the experiences of ACPS employees with the Technology Services department. The results cover a variety of important topics, with a particular emphasis on customer service delivered by Technology Services.

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## Participation



A total of 568 ACPS employees participated in the questionnaire – with approximately 2,180 employees, the questionnaire had a response rate of 26%.

The majority of employees to respond were school-based teachers/instructional employees (64%). Elementary school employees represented the highest proportion of respondents (49%) and the majority of respondents have been employed at ACPS more than five years (59%).

### **Recommendation 1: Empower Employees to Help Themselves**

Based on questionnaire feedback, the working group felt that ACPS employees are relying primarily on relationships to solve technology issues (asking a friend or colleague for help). Based on questionnaire feedback in the comments section, employees would like technology assistance personnel to be building-based (old TRT model vs. new TIS model).

The working group felt employees need to be knowledgeable of where to find help guides online, many of which are posted in Blackboard under the Technology Services tab. Employees should also be encouraged to seek assistance from online resources such as the Atomic Learning tutorials.

### **Recommendation 2: Improve Communications to Ensure Employees Are Aware of Training Opportunities**

Training is a large issue and suggestions include providing online webinars for training on certain topics. Teachers want to be able to go to ERO and find what training is available throughout the year.

The working group felt that from the results, the first issue to address is communication to make sure employees are aware of training opportunities available to them. The communications improvements need to be made prior to focusing on any new training to be offered to maximize participation.

### **Recommendation 3: Continue Current Process for Requesting Technical Equipment**

Based on the questionnaire feedback, the process for requesting technical equipment is being followed in the correct way with requests being made to Technology Integration Specialists and Help Desk.

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#### **Recommendation 4: Balance Work Load for Data Requests**



Based on the questionnaire feedback, ACPS employees are comfortable with the data request process. However, Technology Services staff members are over-worked to meet these requests and the department will need to address this issue.

#### **Recommendation 5: Improve Communications**

Based on the questionnaire feedback, the processes that were identified as most critical were training (37.50%), technical assistance/response to issues (30.81%) and communication and outreach process (13.20%). The working group felt that improvements in communication, both internal and external, would result in improvements in training and technical assistance, therefore it should be the first process to address.

#### **Conclusion**

The purpose of the 2010-2011 Technology Services Customer Service Questionnaire was to gather feedback from ACPS employees to help Technology Services measure current performance, improve key processes, and plan for the future provides.

The results provide insights into areas that Technology Services can address to better service customers. It is clear from this review of the results that respondents were generally positive about their interactions with Technology Services, but continue to need additional training opportunities and better communication from Technology Services.

The working group discussed which processes were most critical, with the choices focused between training and communications.

The working group decided to focus on communications as the first process to be re-engineered and improved since effective communications would be necessary for training initiatives to be successful. The short-term strategy includes:

- Review internal communications processes within TS including roles of employees and department goals
- Analyze each department to determine how best to communicate with each
- Develop standards of practice for all communications, both internal and external



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## Appendix 6 - Online Learning

### Introduction and Operational Readiness

This report contains information regarding the current operations and future opportunities provided by the Online Learning Program operated by Alexandria City Public Schools (ACPS-OLP). This Plan is provided to the Superintendent for the purpose of proposing future goals for ACPS-OLP.

The mission of Alexandria City Public Schools, as set forth in the 2010-15 Strategic Plan reads, “*Provide the environment, resources, and commitment to ensure that each and every student succeeds—academically, emotionally, physically, and socially.*” Knowing that students have various academic needs, interests, and preferred learning environments, ACPS has created the Online Learning Program (OLP) as one strategy for ensuring that students have access to quality courses, instruction, and choice of learning environment to help them achieve academic success.

By having the foresight to implement programs that make technology readily available to students and educators and by providing both groups the support that they need to maximize this investment, Alexandria City Public Schools has uniquely positioned itself to expand online learning options to students in a way that the majority of other school districts in Virginia, indeed the U.S., have not yet attempted. Examples of these proactive measures include the implementation of 1:1 laptop program in the district; the “Wireless Wiz” service that provides students with high-speed Internet access throughout public places in the district; and certainly the initial investment that has been made into the creation of the OLP over the past two years has laid the groundwork for online learning to expand and ultimately provide online learning options to every student who attends a ACPS school.

### About Online Learning

The International Association for K-12 Online Learning estimates that over 1.5 million K-12 students were engaged in online learning the 2009-2010 school year. Although K-12 education lags behind post-secondary in using the Internet to teach, many states and school districts are realizing the benefits of online education which allows students unparalleled equity and access to high quality education unconstrained by time and place.

There are many types of online education programs such as state virtual schools, charter schools, multidistrict programs, single district programs, programs run by universities, blended programs, private schools, and consortium based programs to name some of the more common program types. Across most states and all grade levels, students are finding increased opportunity, flexibility, and convenience through online learning. Teachers are discovering a new way to reach students, many of whom were not successful in traditional classrooms. Administrators are exploring ways to offer a wider range of courses to students and professional development opportunities for teachers.



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Online learning is expanding also because technology in education is an appropriate, and perhaps necessary, way to educate the many digital students of this generation. For this Millennial generation, technology is an integral part of their lives, essential as a tool for locating information, communicating, and as a way to entertain themselves. They expect their education to be in line with their every day technology-rich experiences.

- 38 states have state virtual schools or state-led online initiatives.
- 27 states and the District of Columbia have full-time online schools serving students statewide
- 20 states are providing both supplemental and full-time online learning options statewide


The fact that online learning has been successful for many schools across the country does not mean that it has been free of challenges. Indeed, there are numerous issues and challenges in online learning. Few policymakers anticipated that any space time, any space place learning was possible when most education laws were authored over the past 50 years. The issues largely center on determining when existing educational policies are appropriate for this new model of learning and when new policies should be created. Educators and policymakers are frequently striving to gain a deeper understanding of how online education programs operate, what an online course looks like, and most fundamentally, how students can learn online.

(adapted from A National Primer for K12 Online Learning: iNACOL, October 2010) About ACPS-OLP and Key Questions

ACPS-OLP is the district's program responsible for the oversight, distribution, and quality assurance of online learning opportunities for ACPS students. Started in 2009, ACPS-OLP currently provides students with over 275 online course options, as well as online learning opportunities such as online tutoring and test preparation. For the 2010-11 school year, 199 ACPS students have enrolled in at least one online course.

As ACPS-OLP prepares to expand the number of students served and the services provided the necessity of a comprehensive business plan became paramount. A few core questions to be considered are:

- How will ACPS-OLP continue to leverage resources to improve services and products for ACPS students?
- What services or products should ACPS-OLP provide and what needs do they fill?
- How can the work of ACPS-OLP be leveraged to promote the use of technology and digital content in traditional classrooms?
- What partnering opportunities exist with other districts and organizations to expand online learning option in a cost-efficient manner?
- How will ACPS-OLP reach its potential customers?

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- What is the level of funding and accountability metrics that need to be in place to sustain and grow the program?

As ACPS looks upon the next 3-5 years, challenges will be realized from both in and outside of the district. Success will be fixed on specific key variables. Additionally, secondary keys to success will impact the expansion and customer service goals of the online learning program. Primary core beliefs include:

- Every student is unique, so learning should be dynamic, flexible and engaging.
- Studies should be integrated rather than isolated.
- Students, parents, community members, and schools share responsibility for learning.
- Students should have choices in how they learn and how they present what they know.
- Students should be provided guidance with school and career planning.
- Assessments should provide insights not only of student progress but also of instruction and curriculum.

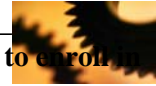
### **Recommendations**

- 1. Identify policy and operational barriers to providing online learning options to students and assist in the development of district policy that will eliminate such barriers.**

Maximizing the benefits that online learning options provide requires that barriers to student participation be reduced or fully eliminated. ACPS leadership should seek to identify barriers to student participation and enact appropriate policies and programs that will provide all ACPS the opportunity to enroll in online courses when academically appropriate.

Barriers include, but are not limited to:

- Lack of awareness among students that online learning options exist
- Restricting student participation for reasons other than academic appropriateness
- Limiting students to the number of online courses that may be taken
- Staffing to fully support online students during and after regular school day
- Limited staff to manage the online program
- Access to physical space to support the growth of the online program
- Attempting to fit access and participation in online learning options into a traditional calendar format



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**2. Increase operational capacity to enable every ACPS high school student to enroll in at least one online course beginning with the 2012-13 school year.**

ACPS should set the goal of having every student take at least one online course prior to graduation. Similarly, the ACPS-OLP should increase its operational capacity that would enable every ACPS high school student to enroll in at least one online course beginning in 2012. Accomplishing this goal will require necessary funding, management and instructional staffing, staff development, technology, etc.

**3. Identify and implement strategies to use online learning to serve at-risk students, enabling them to reach the goal of graduation.**

Online learning can be an effective way for at-risk students to achieve academic success by providing greater individualization of instruction as well as providing the flexibility of time; from when the student may begin or end their course to the flexibility of time of day and day of the week in which they access their coursework.

ACPS-OLP should assess the various programs that currently exist to assist at-risk students and determine how online learning options can bring both academic and economic value to the district.

**4. Build the capacity to have ACPS teachers trained in online instruction thus reducing the need to use online teachers from outside providers.**

ACPS-OLP currently offers online courses primarily through contractual relationships with outside providers of courses and instruction. While using online providers in such a manner is an effective way to launch an online program, over time it is preferable to engage more ACPS teachers as online teachers. Doing so will not only reduce the per-student cost of delivering online courses, it will also provide ACPS teachers the opportunity to grow in their use of technology and 21<sup>st</sup> century teaching skills.

ACPS should set the goal of having at least one in-district teacher trained and utilized as an online teacher for each core content area.

**5. Explore and create collaborative agreements with neighboring districts and programs to increase capacity and services of the online learning options provided.**

By creating collaborative relationship with neighboring districts, ACPS can seek to expand the number of online courses that are offered while potentially reducing delivery costs. ACPS-OLP may explore the possibility to enroll out-of-districts students into their online learning program as a means of generating potential revenue for the program.

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Opportunities with local universities and/or community colleges should also be explored.



**6. Expand online learning options to middle school.**

ACPS-OLP currently offers only high school level courses and services. Expansion of online courses and services to middle school students should be pursued with options available for students beginning in 2012.

**7. Explore the feasibility of creating a full-time online program option for ACPS students.**

A feasibility study should be conducted to determine whether there is enough student/parent interest to create a full-time virtual school option within ACPS. Such an option could potentially serve to keep more students from leaving ACPS as well as a way to attract home school and private school students to attend ACPS.

**8. Create and implement a marketing plan to spread awareness about online learning options provided by ACPS-OLP to students, parents, ACPS staff, and the community at-large.**

ACPS should proactively promote the online offerings of the ACPS-OLP. Leadership should evaluate all forms of communications currently used to alert parents and students about academic offerings and begin sharing information about online learning options.

Regular meetings and communication with appropriate district and school staff to inform them of the ACPS-OLP should be enacted.

**9. Continually assess the courses and services offered by ACPS-OLP to ensure alignment with student and district academic needs.**

Only through constant evaluation of services will the ACPS-OLP be able to ensure that their offerings are meeting the needs of students. A yearly review of ACPS offerings should be conducted to determine what changes and additions are needed to the portfolio of online learning options. Student and parent feedback surveys should be conducted on an annual basis.

The ACPS Online Learning Program (ACPS-OLP) has experienced substantial growth in the last year, as set forth in the ACPS Education Plan. Under objective 17, the 2010-2011 target for 9<sup>th</sup>-12<sup>th</sup> grade student completion of online course was 150 students. This target has been surpassed this year. The future target for school years 2011-2013 has been set for 300 students, including grades 6-8.



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Attached you will find participation statistics broken down by NCLB subgroups, as well as enrollment by course. Some highlighted statistics are below.

- Between 2009-2010 and 2010-2011 school year the number of students taking online courses grew from 33 to 199, this represents over a 500% increase.
- Between November of 2010 and May of 2011, the online learning program has grown from 80 students to 199 students, this represents a growth of 148%.
- Over the two academic years, 22 out of 233 students who participated in online learning were special education students (10%) and 15 were ELL students (7%).

**Note about ELL:**

Aventa, one of three ACPS vendors, offers courses called "foundations". The foundational courses are written with LEP/ELL students in mind. The lexile level is written at a grade level below the content with built-in that serve students' needs. One of the reasons ACPS selected Aventa is because they recognize that schools and districts are challenged to meet the needs of students learning English as a second language. To assist with these challenges they have designed their credit recovery courses to include English Language Learner (ELL) support including:

- vocabulary instruction in English and Spanish at the start of the course
- audio representation of instructional text - students click on an icon to have the text read aloud
- lowered instructional reading level

One of the goals of ACPS-OLP is to research and secure a vendor that can provide additional opportunities for our ELL students that transfer in mid-year and require additional support before being ready to participate in a class and/or due to the timing of their transfer, would not be able to earn any credit given their start date. For that reason, a Request for Information is being released this July for possible additional options.

**Note about how ACPS is using a blended learning model to facilitate graduation for at-risk students:**

In February, 2011 TC Williams math teachers worked together to identify 21 seniors that had failed the first semester of Geometry and were currently in danger of failing the second semester. Subsequently, these students would not graduate in the spring. The students were pulled together to participate in the "Geometry ReStart" group and were able to start over at the beginning of the course content with the support of a highly qualified Geometry teacher in a blended learning model. *Currently, 17 out of the 21 students are on track to complete and pass the Geometry course by June.*

ACPS-OLP plans to extend the Restart program to include Algebra 1 students during the 2011-2012 school year. Online learning and blended learning have the potential to meet the needs of an increased number of students in need of Algebra 1 credit recovery before they finish 9th grade, thereby having a greater impact on graduation rates.



<b>Number of Online Learning Students by Ethnicity</b>							
<b>Year</b>	<b>Asian/Pacific Islander</b>	<b>Black/Not of Hispanic Origin</b>	<b>Hispanic</b>	<b>Native Hawaiian</b>	<b>Unspecified</b>	<b>White/Not of Hispanic Origin</b>	<b>Grand Total</b>
2009	3	14	4		5	8	34
2010	17	80	40	2	8	52	198
Grand Total	20	94	44	2	13	60	233

<b>Number of Online Learning Students by Gender</b>			
<b>Year</b>	<b>Females</b>	<b>Males</b>	<b>Grand Total</b>
2009	15	19	34
2010	107	92	198
Grand Total	122	111	233

<b>Number of Spec Education Students Participating in Online Learning</b>			
<b>Year</b>	<b>Not SpecEd</b>	<b># SpecEd</b>	<b>Grand Total</b>
2009	34		34
2010	177	22	199
Grand Total	211	22	232

<b>Number of LEP Students Participating in Online Learning</b>			
<b>Year</b>	<b># LEP</b>	<b>Non-LEP</b>	<b>Grand Total</b>
2009	8	26	34
2010	15	183	199
Grand Total	23	210	233

<b>Number of Disadvantaged Students Participating Online Learning</b>			
<b>Year</b>	<b>Y</b>	<b>N</b>	<b>Grand Total</b>
2009	17	17	34
2010	94	104	198
Grand Total	111	122	233



Course Name	Total
Virtual HS (2009)	34
Academic Writing	1
Accounting	1
Algebra 1	2
Algebra 2	1
Amer. Multiculturalism	1
American Popular Music	1
Animal Behavior/Zoology	2
AP European History*	1
AP Macro Economics	1
AP Statistics*	4
Biology 1	1
Blog, Wikis / Web Tools	1
Business/Personal Law	1
Career Planning	9
Chinese 1	13
Chinese 2	8
Chinese 3	4
Chinese II	11
Community Service	1
Computer Fundamentals	1
Criminology	2
Current Am. Law Issues	1
Democracy in America	1
Digital Photography	1
Earth Science	2
English 10	5
English 12	8
English 9	2
Environmental Science	1
Forensic Science	1
French 1	2
French 3	2
Game Design	3
Genes and Diseases	1
Course Name	Total
Geography	2
Geometry	23
Health	2
Health/PE 10	4
Intro to Psychology H*	7

Java Programming	
Latin 2	1
Life Skills	1
Meteorology	1
Music Appreciation	2
Music Composition	1
Mythology	1
Number Theory	1
Nutrition and Wellness	5
Oceanography	2
Pearl Harbor	1
Personal Finance	5
Portuguese	1
Practical Law	1
Pre-Calculus	2
Pre-Veterinary Medicine	2
Psychology of Crime	3
Screenwriting Fund	1
Shakespeare in Films	1
Sociology	1
Spanish 1	3
Spanish 2	1
The Holocaust	3
The Human Body	2
Trigonometry	6
Web Design	2
World Civilization A1	5
World Civilization A2	4
World Conflict	1
World History	1
World Religions	1
Grand Total	233



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## **Appendix 7 - Professional Development Program Descriptions**

### **Teacher Leadership Program**

Teacher Leadership Project is a cohort of classroom teachers interested in research, sustained new learning and collaboration on how to engage students in project-based learning using technology. Participating teachers will attend 3 full day workshops in the summer, 3 full day workshops during the school year and 3 after-school meetings. Benefits of this cohort include 100 hours of recertification credit, necessary equipment to facilitate teaching and learning in your classroom and a \$500 stipend.

### **NETS\*T**

NETS\*T Certification is an internationally recognized certification program that engages teachers in a deeply reflective, intensive process to determine if their instructional technology practices meet the National Educational Technology Standards for Teachers standards set forth by the International Society for Technology in Education (ISTE).

### **Room 21**

This professional development is offered for TC teachers who want to better incorporate 21st Century teaching and learning in their classrooms.

### **TIE**

ACPS offers the Technology Integration Education (TIE) program which satisfies the Virginia technology standards. This program provides hands-on training for instructional personnel to develop and demonstrate proficiency in the required state technology standards and thus meets the requirements for licensure or renewal. The state technology standards are often referred to as the TSIPs (Technology Standards for Instructional Personnel).



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## **Appendix 8 - Program Plans**

### ***Elementary Program Plan***

#### **Elementary School Technology Program Plan 2011-2014**

##### **Current Tools and Resources:**

All elementary classrooms are provided with a basic technology system including a minimum of 3 networked student workstations configured with an elementary school image, networked teacher laptop, an lcd projector, a document camera and most classrooms are equipped with an integrated sound enhancement system. Teachers have access to digital cameras, student response systems, digital tablets, and other peripheral tools. It is expected that all teachers demonstrate a working knowledge of the following applications: Microsoft Office Suite, Kidspiration, EveryDay Math Support software, and web based applications such as Britannica and World Book Online, Brain Pop, SOL Pass, and United Streaming allowing students to apply and extend learning. Blackboard, a content management system, is utilized by most schools for staff communication and productivity. Each Kindergarten classroom has access to a minimum of 3 student workstations that support Breakthrough to Literacy software. Student software includes Microsoft Word, PowerPoint, Excel. Insp/Kidspiration SMART Student Notebook, Graphic organizer software,-and the following web-based software subscriptions: BrainPop. United Streaming, SOL Pass, Atomic Learning, First In Math, and Everyday Math.

##### **Video Production**

Each elementary school has the video equipment needed to create and broadcast in-house multi media productions that support the instructional process.

##### **Blackboard**

All elementary schools have access to the ACPS Blackboard site. 11 of the 13 elementary schools have implemented Blackboard within their schools. Teachers, students and parents can communicate and collaborate within the instructional setting, while students can view and interact with posted course material. Implementation with the remaining elementary schools is scheduled to take place during the 2011-2012 school year.

##### **Internet Safety**

Each elementary school integrates Internet Safety into the learning experiences of their students. This can include parent presentations, student assemblies, classroom instruction, effective use of desktop and screensaver wallpapers, and character lessons delivered by the guidance counselor.

##### **Integration Support**



Each elementary school is supported by a Technology Integration Specialist (TIS) that models curriculum integration into instruction. The TIS also serves as a liaison to both the Instructional and Information Technology department.

**Program goals for 2011-2014:**

- Implement the use of Blackboard with all elementary schools, their students and families.
- Increase student access to digital resources in and out of school
- Ensure all teachers are equipped to provide students with opportunities to benefit from ACPS digital resources
- Establish a digital repository for model lessons, best practices, and available resources.
- Provide lcd projectors and document cameras for all instructional settings
- Continue to offer professional development opportunities that are content-specific and aligned with the new ACPS Curriculum
- Create more opportunities for teachers to identify instructional technology learning goals in order to more directly impact their learning and teaching.
- Offer instructional technology professional development for instructional leaders
- Annually review hardware, software and online subscription and map these resources to content and instructional strategies, increasing the connection for students, parents, and teachers between their content and the technology resources available to them
- Spotlight examples of student and teacher work in order to help diverse audiences better understand our resources and practices to support student learning

***Middle School Program Plan***

All six ACPS middle schools are similarly equipped with hardware, software, and other technology support resources. A typical middle school classroom is provided with a basic technology system which includes both wireless and wired network access, an lcd projector, and a document camera. Middle school departments have access to a minimum of one computer laptop cart with 24 student laptops. The cart to department ratio is at least 1:1 The carts are scheduled using a shared calendar, accessible to all staff members in real time. Schools each have access to one computer lab equipped with 25 student workstations. There are also laptop carts available for use in the libraries. Additional hardware resources including wireless tablets, student response systems, and digital cameras are available for checkout. It is expected that teachers and students demonstrate a working knowledge of ACPS supported software applications and web based subscriptions. These include Microsoft Office Suite, Inspiration, and web based applications such as Britannica and World Book Online, Nettekker, Brain Pop, SMART Student Notebook, SOL Pass, and Discovery Education



Streaming, STAR Express, and Blackboard. Additional hardware and software are made available for teachers and students with learning needs requiring adaptive technologies.

### **Video Production**

Each middle school has the video equipment needed to create and broadcast in-house multi media productions that support the instructional process. Every school has an assigned TV studio coordinator to help with the production and broadcast of these programs.

### **Blackboard**

Beginning with the 2007-08 school year all six middle schools implemented the use of Blackboard with their student population. Teachers created course access for their students as a vehicle for reinforcing instruction as well as creating a platform for collaboration and communication regarding curriculum content. Blackboard is used as a vehicle to enhance teacher - parent communication and information sharing and for collaboration among instructional staff. Instructors can use Blackboard as a platform to assess and evaluate student learning as well as collect assignments and check for plagiarism. Within school faculties Blackboard is also being used as a way to collect information such as weekly lesson plans, and quarterly assessment data.

### **Parent Portal**

Alexandria Academic Access (AAA) allows parents and students to view student achievement/grades in their classes and monitor daily attendance.

### **Internet Safety**

Internet Safety instruction is integrated into the learning experiences of middle school students. This includes parent presentations as well as classroom instruction.

### **Integration Support**

Technology at each middle school is supported by Technology Integration Specialists. There are large group, small group, and one-to-one professional development opportunities in addition to co-teaching and model teaching. Special Professional Development programs include Teacher Leadership Program (<http://www.acps.k12.va.us/technology/tlp/>), NETS-T (<http://www.acps.k12.va.us/technology/netst/>), and Digital Reading and Writing. Technology Integration Education (T.I.E.) where teachers learn to integrate technology into their teaching.

### **Assessment**

Grade level SOL tests are administered online. In addition, each quarter all core subject areas administer a quarterly test, which is electronically scored. Student response systems (clickers) and Blackboard a number of diagnostic statistics can be created from the quarterly test data.

### **Program goals for 2011-2014:**

- Provide a 3:1 student to computer ratio
- Continue to offer professional development opportunities that are content-specific and aligned with the new ACPS Curriculum



- Create more opportunities for teachers to identify instructional technology learning goals in order to more directly impact their learning and teaching.
- Offer instructional technology professional development for instructional leaders
- Annually review hardware, software and online subscription and map these resources to content and instructional strategies, increasing the connection for students, parents, and teachers between their content and the technology resources available to them
- Create more learning opportunities for students about computer use and care including information about internet safety and digital citizenship
- Spotlight examples of student and teacher work in order to help diverse audiences better understand our resources and practices to support student learning
- Collaborate with curriculum specialists and instructional coaches to continually upgrade teaching and learning to include digital experiences and 21st century competencies
- Expand online learning options for students
- Establish technology committees within each middle school
- Identify and support technology leaders within each middle school
- Promote the use of mobile tech to create classroom discourse
- Use tools such as blogs, twitter, and wikis to more effectively share knowledge both within ACPS and with outsiders
- Provide every middle school student with a unique network logon and limited personal storage for school related projects.
- Use the available technology to assist in formative assessment to guide student learning.

## ***High School Program Plan***

### **High School Technology Program Plan 2011-2014**

#### **Current Tools and Resources:**

In 2003 ACPS implemented a one-to-one laptop computing environment at Minnie Howard, and in 2004 expanded it to T.C. Williams. This project focuses on providing a technology-rich learning environment that is equitable, engaging and authentic for all students and is supported by a high speed, secured network. Each student in grades 9-12 is issued a laptop computer for use at home and in class. Students access and complete course assignments, collaborate on projects, participate in discussions and complete assessments online. At school, students use 1 GB wireless network which provides connectivity to applications, e-mail, the Internet, and printing services. All teachers and students have access to Blackboard, which is the main



digital instructional tool for the one-to-one environment. Away from school, each laptop computer has access to a wireless wizard service which provides access to the internet and the same resources available at school.

Applications available on the laptops include the full Microsoft Office Professional Suite, Inspiration (used for graphic organizers), multimedia software, as well as a variety of instructional applications such as Geometer's Sketchpad and SOL practice tests. In addition, teachers and students have access to a variety of online databases and web-based subscriptions. In addition to the laptop computers, the majority of classrooms are equipped with visual and audio presentation systems to support instruction. Many teachers also use wireless digital tablets and the projector as interactive instructional tools. Digital cameras, digital video recorders, digital audio recorders, scanners, student response systems, and other tools give teachers many ways to engage all students in their learning. Classrooms for specialized instructional areas have additional technology. For instance, the students in the music department have access to desktop computers with specialized software for music production. This is also true for the art and developmental reading classes.

### **Video Production**

Another aspect of technology in the high schools is the use of the television studios. At TC Williams High School, advanced students of TV Production II produce two different show formats per year: one that is a sketch/comedy 2-host talk show that is 30 minutes long, and one that is a news/highlights single-host show that is 10 minutes long. They also produce a daily morning announcements show. In all of these activities, students use the ACPS television station facilities, providing exposure to industry-standard equipment. Students learn advanced competencies and skills needed for entry level positions in TV stations and post-production houses. TCW News, a weekly news and magazine TV broadcast, is produced and recorded in the TV studio and broadcast over an in-house cable channel. In addition, the TV studio is used for a number of other broadcasts: curriculum video projects; a monthly superintendent's talk show; a monthly TV version of the school newspaper; and broadcasts of various guest speakers and school events.

### **Blackboard**

All high school teachers are required to use Blackboard as a component of their class. Teachers use Blackboard to post course documents, conduct online discussions, connect to web-based activities, and to assess student learning.

### **Internet Safety**

The high schools are implementing plans for the integration of Internet Safety into the learning experiences of their students. This includes parent presentations, student assemblies, classroom instruction, and web resources available through Blackboard.



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## Integration Support

Technology in the high schools is supported by four full time Technology Integration Specialists. There are large group, small group, and one-to-one professional development opportunities in addition to co-teaching and model teaching.

Professional Development programs include Teacher Leadership Program

(<http://www.acps.k12.va.us/technology/tlp/>), NETS-T

(<http://www.acps.k12.va.us/technology/netst/>), Technology Integration Education (T.I.E.) where teachers learn to integrate technology into their teaching.

## Parent Portal

Alexandria Academic Access (AAA) allows parents and students to view student achievement/grades in their classes and monitor daily attendance

## Program goals for 2011-2015:

- Increase participation in Virtual High School, Virtual Virginia, and other online course offerings to address diverse student and faculty needs, including opportunities for increased course offerings, credit recovery, and rolling enrollment.
- Create a student technology support group to provide technology support for students including software assistance, technical trouble-shooting, and advise for computer care and maintenance.
- Continue to investigate options for remote computing access including the use of 3-G cards in all student laptops.
- Continue to offer professional development opportunities that are content-specific.
- Create more opportunities for teachers to identify instructional technology learning goals in order to more directly impact their learning and teaching.
- Offer instructional technology professional development for instructional leaders
- Annually review hardware, software and online subscription and map these resources to content and instructional strategies, increasing the connection for students, parents, and teachers between their content and the technology resources available to them
- Create more learning opportunities for students about computer use and care including information about internet safety and digital citizenship
- Continue to use focus groups and surveys to assess instructional technology needs and wants
- Spotlight examples of student and teacher work in order to help diverse audiences better understand our resources and practices to support student learning
- Ensure all teachers are equipped to provide students with opportunities to benefit from ACPS digital resources
- Establish a digital repository for model lessons, best practices, and available resources.
- Continue to seek additional remote computing access options including wireless access points



- Continue to offer professional development opportunities that are content-specific and aligned with the new ACPS Curriculum
- Collaborate with curriculum specialists and instructional coaches to continually upgrade teaching and learning to include digital experiences and 21st century competencies