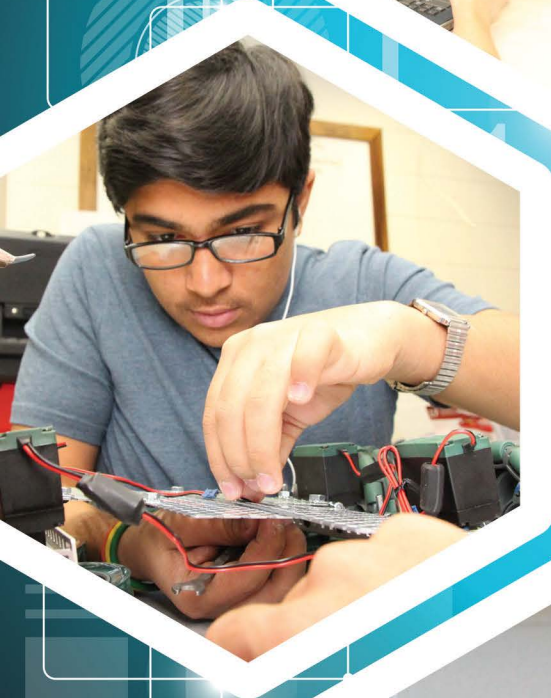


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2016 - 2018 Technology Plan



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Courtney Jones
Elementary ITRT

Penny Hodge
Assistant Superintendent of Operations

Jeff Terry
Chief Information Officer

Ryan McCormack
Systems Analyst

Meg Swecker
Coordinator of Technology Integration

Technology Advisory Committee 2015-16

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Executive Summary

The Educational Technology Plan 2016-18 is designed as a road map for the successful implementation of technology to serve all aspects of our mission. This document serves as a link between the strategies outlined in the Roanoke County Public Schools Comprehensive Plan and the goals and objectives contained in the Educational Technology Plan for Virginia:

2016-18. Roanoke County Public Schools continues to adapt the five areas of concentration in the state plan: Environment, Engagement, Application, Tools, and Results. This plan outlines specific strategies for meeting each identified goal.

Each section of this plan includes specific objectives, strategies, and measures, along with personnel responsible. All strategies with key information are summarized in the “Timeline and Fiscal Analysis” section which is also intended to become an evaluation tool used to assess annual progress.

The mission and overall goal is to use technology effectively for improvement of learning. Focus is on continued support, professional development, and assessment to foster integration at all levels. We recognize that leadership plays a key role in classroom use and integration of technology and this plan focuses on continued professional development for administrators. This plan proposes the addition of personnel to provide “just in time” support for teachers and learners in the classroom. This plan recognizes the rapid change in technology and the need for continuous monitoring and evaluation of available resources.

The successful implementation of this plan requires the commitment of all stakeholders. It is a collaborative effort to provide the best possible learning environment for each student served by Roanoke County Public Schools.

Roanoke County's technology plan is a collaborative endeavor by all stakeholders to communicate a comprehensive vision for the use of technology to support and enhance all aspects of our school system. Each goal in this plan directly correlates with goals and objectives set forth in the *Roanoke County Public Schools Comprehensive Plan* which is a flexible document that is reviewed annually and updated by the Roanoke County School Board to meet changing needs within our education community. *The Roanoke County Public Schools Comprehensive Plan* supports our mission as a school system which is "to ensure quality learning experiences designed to equip all students with the skills to adapt and thrive in a changing global environment." The Roanoke County School Board establishes the following beliefs and assumptions in its improvement plan:

1. All children can learn.
2. The individual school controls enough variables to assure that virtually all children can be motivated to learn.
3. A school's stakeholders are the most qualified people to implement needed changes.
4. School-by-school change is the best hope for reform.

Instructional goals for Roanoke County Public Schools, as set forth in the Comprehensive Plan are:

1. Prepare all students, consistent with their ability and potential, to be productive citizens in a democratic and diverse society.
2. Implement instructional practices and programs that enable students to meet established standards of achievement and foster life-long learning.
3. Develop an instructional climate centered on dignity and respect.
4. Meet or exceed state and federal guidelines for student achievement.

Our goal for the use of technology to support instruction is:

To enable students to meet and exceed established standards of achievement and foster lifelong learning.

Roanoke County’s technology plan incorporates these beliefs by creating a shared vision for the use of technology across all schools and curricula, while recognizing individual school, classroom, and student needs. The plan includes both long-term and short-term goals that will, like the division Comprehensive Plan, undergo continuous evaluation to determine the status of each goal. Although this plan is constructed to cover a five-year period, we recognize that emerging technologies and changing student needs require that technology plans be under constant review. Following annual review, goals and strategies will be updated as necessary to meet ever changing needs. This plan will directly support the goals set forth in the *Educational Technology Plan for Virginia: 2010-15*, and contains the five focus areas:

Physical and virtual **environments** that are used in innovative ways to support learning activities;

Engagement of students through technology, reflecting learning styles, cultural backgrounds, and personal interests;

Application of technology tools for communication and creative problem solving;

Technology **Tools** used to extend student capabilities to perform functions that would be difficult, if not impossible, without technology; and

Results that not only meet accountability requirements, but also include real-time assessments that inform instruction must be employed to address 21st Century skills and knowledge.

Roanoke County shares the state’s vision that the major purpose of an instructional technology plan is “to enhance students’ academic achievement through the use of technology.” This plan will expand on Roanoke County’s mission statement for the use of technology:

Mission

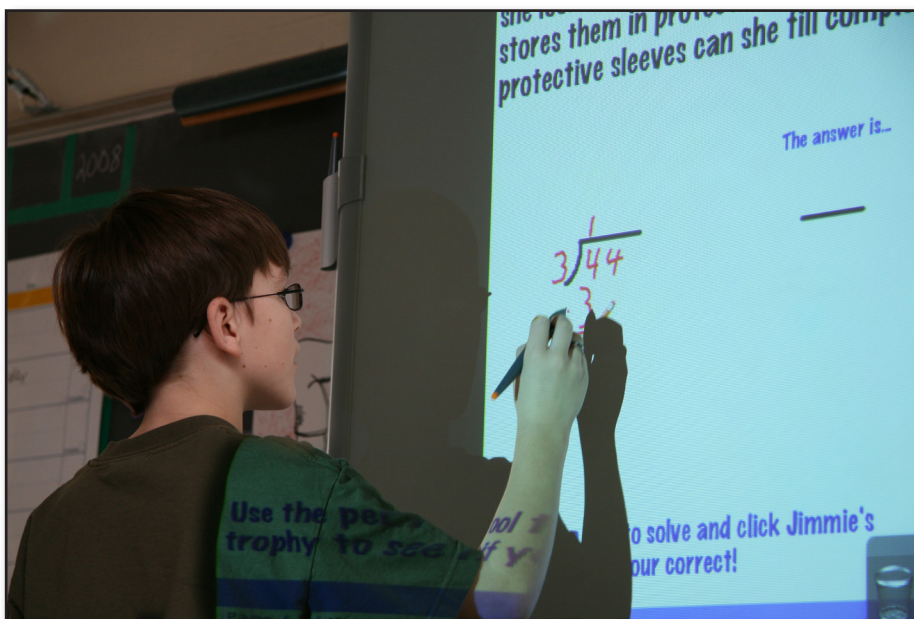
The mission of Roanoke County Public Schools is to ensure quality learning experiences designed to equip all students with the skills to adapt and thrive in a changing global environment.

Empowering all students through technology and 21st Century skills: critical thinking, collaboration, creativity, and communication.

Roanoke County Public Schools envisions technology as an integral part of daily learning in each classroom. We believe that technology will empower students to make wise choices, assume ownership of their own learning, and become producers of knowledge rather than just consumers. These invaluable tools are keys to preparing them for the future they face.

We strive for fusion of technology and curricula that is seamless and invisible. Reaching this goal requires consistent models and frameworks, sufficient quantities of reliable hardware and software, adequate support, and a robust network infrastructure to guarantee ease of use regardless of the application chosen to meet the unique needs of the learner. The use of technology has become as natural as the chalkboard or the pencil.

Along with the plethora of knowledge available via networks also comes the responsibility of preparing students to be literate consumers of information. We must guide students to answer the question, “How will this information help me reach my goal?” We recognize that it is not the technology itself that is important, but how we use a variety of technology tools as consumers and producers of information.



A student at Glen Cove Elementary School completes a division problem using the Activboard.

The Planning Process

Planning for the effective use of technology is an ongoing collaborative process that began with the first comprehensive Technology Plan adopted in 1993. The original plan underwent its last major revision as a separate plan in 1998. Since September 2000, the close alignment of overall school division goals with technology goals has generated an annual review and update of the “goals” portion of our Technology Plan. Each goal included in the Roanoke County Comprehensive Plan was developed with input from all stakeholders: administrators, teachers, support personnel, parents, students, business leaders, and community members. In addition the Roanoke County Schools Technology Advisory Committee provides annual review and feedback of the status of each technology goal. The Advisory Committee is a broad-based group with representation from many and varied stakeholders: administrators, teachers, business leaders, higher education, parents, law enforcement representatives, public library officials, and students.

The previous revision of the Technology Plan reflected an extensive alignment process. As we began the process of revising our Technology Plan to assess current needs and align with the Educational Technology Plan for Virginia 2010-15 we brought together a comprehensive technology planning committee whose membership included building and central administrators, teachers, library media specialists, and technology support staff. Student input was received from the Roanoke County School Board Student Advisory Committee. This committee met as a group to review our current vision and mission, brainstorming additional areas to be included. Each member was assigned to a sub-committee for development of specific goals. Each sub-committee reported back to the full committee where additional refinement of goals occurred. A draft of the committee work was presented to the Advisory Committee for Instructional Technology, RCPS TAC, who supplied additional feedback strengthening the plan. The result of this process is a comprehensive plan for the use of educational technology by Roanoke County Public Schools.

The collaborative efforts of many individuals made this plan an excellent roadmap for success. The RCPS TAC communicated on this process in face to face meetings and via our committee wiki. The RCPS TAC wiki, <http://rcpstac.wikispaces.com/> continues to serve as a portal of communication for the group.

The 2010-16 plan has been reviewed annually by the Advisory Committee and has evolved into this current document which represents goals, objectives and strategies going forward toward 2016. Another extensive revision of the Technology Plan is anticipated after 2016-18 after changes are made to the Technology Plan for Virginia and a new RCPS Comprehensive Plan is adopted.

The RCPS Technology Plan Update will be made available on the Roanoke County Public Schools Web site (<http://www.rcs.k12.va.us>). Major goals, objectives, and strategies will be included in Roanoke County's Comprehensive Plan as well. Representatives from each school will use the Technology Plan to develop and align their school annual technology plan and RCAP (Roanoke County Accreditation Plan) Technology Goals. Efforts will be made to promote the plan through community groups, such as the Roanoke County Council of PTAs and civic groups having an interest in the educational community.



Needs Assessment

In an effort to embrace 21st Century Technologies and develop the technology plan, Roanoke County Schools continually conducts needs assessments and modifies programs accordingly.

The Roanoke County School Board required that all staff exhibit the ability to meet the TSIP (Technology Standards for Instructional Personnel) by successfully completing a Technology Portfolio by June 2000. Professional staff joining Roanoke County since that time must complete a portfolio by January of the school year in which hired unless basic technology proficiencies are indicated on their professional license.

Recent surveys of teachers, administrators, parents and students have indicated the following conditions:

- More than 85% of high school parents and teachers think that access to computers and the Internet are important to academic success.
- Approximately 93% of Roanoke County students report having Internet access in the home.
- Ninety-eight percent (98%) of all Roanoke County teachers feel it is “somewhat important” or “very important” to implement technology into the curriculum.
- Approximately fifty-six percent of all Roanoke County teachers feel they would benefit from additional professional development in areas of technology integration, Internet Safety, and 21st Century Literacies.
- While 65% of all Roanoke County teachers use their Activboards frequently, 90% report using MS Office and drill and practice software on a weekly basis.
- Less than 10% of Roanoke County teachers use more current technologies, such as blogs, wikis, podcasts and videocasts, GPS units, or iPod Touches on a regular basis.

This data shows that, while teachers embrace the use of technology in the classroom, they still do not fully understand how technology transforms the pedagogical process. ITRTs and administrators report that teachers continue to make significant progress in the utilization of technology as a tool, but still need to move forward to understand and implement seamless application of technology to teach 21st century skills. Therefore, this plan addresses specific areas that will be addressed, including:

- Provision of a structure to allow building and central office administrators to formulate visions of the 21st century classroom;
- Expansion of administrative skill in evaluation of seamless inclusion of technology in effective instruction;
- Exploration of virtual learning opportunities by teachers;
- Continuation and expansion of individual and group support for teacher growth by technology staff; and
- Ongoing and continuous revision of district plans.



Students at Herman L. Horn Elementary School participate in a social studies lesson using GPS devices to find information caches around the school.

Goal 1: Provide a safe, flexible, and effective learning environment for all students.

Objective 1.1: Deliver appropriate and challenging curricula through face-to-face, blended, and virtual learning environments.	
Strategies	Measures/Evaluation Strategies
1. Expand virtual course offerings available through the RCPS Online.	The RCPS Program of Studies Guide
2. Expand dual enrollment offerings by leveraging higher education partnerships.	Describe efforts to expand dual enrollment offerings
3. Expand summer school course offerings to include web-based, personalized learning.	The RCPS Program of Studies Guide Compass Learning data
4. Offer a blended instruction delivery model in Economics and Personal Finance.	Number of students enrolled and course pass rate

Objective 1.2: Provide the technical and human infrastructure necessary to support face-to-face, blended, and virtual learning environments.	
Strategies	Measures/Evaluation
1. Meet or exceed the Standards of Quality staffing requirements for Instructional Technology Resource Teachers.	Maintain or exceed the current 1/1000 ITRT to student standard.
2. Meet or exceed the Standards of Quality staffing requirements for Information Technology personnel.	Maintain or exceed the current 1/1000 IT staff to student standard.
3. Maintain and upgrade the network infrastructure to ensure sufficient bandwidth for online collaborating, testing, and learning.	Description of network improvements
4. Develop the Blackboard initiative for grades K-12 by providing universal space for school/home communication and 24/7 learning.	Blackboard usage statistics
5. Provide access to a robust wireless network, a 1:1 laptop initiative in grades 7-12, interactive whiteboards, and collaborative learning environments.	District inventory

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

Strategies	Measures/Evaluations
1. Provide resources and support for ITRTs, curriculum supervisors, and other professional developers to explore innovative and emerging technologies and their applications in learning environments.	Number of workshops and conferences, face to face and virtual, provided for professional developers; meeting agendas, RCPS Professional Development Calendar
2. Provide ongoing professional development in the effective use of technology to support face-to-face, blended, and virtual learning environments.	RCPS Professional Development Calendar, staff surveys, RCPS Learning Resource Zone

Goal 2: Engage students in meaningful curricular content through the purposeful and effective use of technology.

Objective 2.1: Support innovative professional development practices that promote strategic growth for all educators and collaboration with other educators, experts, and students.

Strategies	Measures/Evaluations
1. Facilitate the development and delivery of professional development opportunities that incorporate peer coaching, mentoring, online training, and reflective practices.	RCPS Professional Development Calendar, staff surveys, C-Change PD Team meeting notes, ITRT meeting notes, principal meeting notes, RCPS Learning Resource Zone
2. Provide ongoing training for administrators and curriculum supervisors in the effective use of technology and collaborative learning tools.	RCPS Professional Development Calendar, staff surveys, annual administrative retreat, Leading Learning memos, principal meeting notes and agendas.
3. Support administrators and curriculum supervisors in the evaluation of meaningful technology practices that enhance instruction.	RCPS Professional Development Calendar, RCPS Technology Continuum Evaluation Tool annual administrative retreat, notes from Instructional Department meetings.

Objective 2.2: Actualize the ability of technology to individualize learning and provide equitable opportunities for all learners.

Strategies	Measures/Evaluations
1. Provide resources and support for the use of technology to assist all learners.	RCPS Professional Development Calendar; iPad cart; 1:1 laptop program
2. Explore the use of mobile learning devices to enhance learning opportunities.	Describe the RCPS mobile learning initiative.

Objective 2.3: Facilitate the implementation of high-quality Internet safety programs.	
Strategies	Measures/Evaluations
1. Identify and disseminate best practices and resources to promote the integration of Internet Safety and security throughout curricula.	Annual evaluation and update of the RCPS Internet Safety Program; K-12 Digital Citizenship Plans
2. Develop and distribute timely Internet safety lessons.	RCPS Internet Safety web site RCPS Learning Resource Zone
3. Support RCPS stakeholders by providing resources, information and workshops on current Internet safety issues.	RCPS Internet Safety web site, RCPS Facebook and Twitter posts, newsletters, workshop descriptions

Goal 3: Afford students with opportunities to apply technology effectively to gain knowledge, develop skills, and create and distribute artifacts that reflect their understandings.

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.	
Strategies	Measures/Evaluations
1. Provide ongoing, personalized and just-in-time resources and support for the implementation of technological and pedagogical innovations.	RCPS Professional Development Calendar, staff survey, ITRT planning documentation
2. Enhance curricula using Internet sites and software that encourage creativity, collaboration, and problem solving.	RCPS Social Bookmarking sites; RCPS Learning Resource Zone
3. Provide resources and support to school board, curriculum supervisors, and administrators to develop and evaluate technology policies that effectively balance instructional innovation and safety and security.	Local and district policy, RCPS Technology Advisory Committee

Objective 3.2: Ensure that students, teachers, and administrators are ICT literate.

Strategies	Measures/Evaluations
1. Maintain TSIP certification for all administrators and instructional personnel.	Annual Technology Status report
2. Develop and deliver high-quality professional development based on C/T SOLs and NETs standards.	RCPS Professional Development Calendar, RCPS Digital Learning library; RCPS Learning Resource Zone
3. Align C/T SOLs and NETS*S standards with K-12 curriculum.	RCPS Strategic Framework
4. Provide support and resources to instructional staff for the effective integration of ICT Literacies into instruction.	RCPS Internet Safety web site

Objective 3.3: Implement technology-based formative assessments that produce further growth in content knowledge and skills development.

Strategies	Measures/Evaluations
1. Deploy Interactive Achievement online Benchmark tests in grades 2-12.	Quarterly benchmark tests administered in grades 2-12.
2. Provide resources and support for Language Arts and Math teachers to use Interactive Achievement in the creation and administration of formative assessments.	RCPS Professional Development Calendar, RCPS Digital Learning library; RCPS Learning Resource Zone

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.

Objective 4.1: Provide resources and support to ensure that every student has access to a computing device.	
Strategies	Measures/Evaluations
1. Provide tools that extend learning capabilities, can be customized to meet individual needs and preferences, and support instruction.	RCPS inventory System; Revised RCPS AUP
2. Evaluate the effectiveness of the 1:1 laptop initiative in grades 9-12.	RCPS Tech Advisory Committee recommendations, staff and student surveys

Objective 4.2: Provide technical and pedagogical support to ensure that students, teachers, and administrators can effectively access and use technology tools.	
Strategies	Measures/Evaluations
1. Provide ongoing, personalized and just-in-time resources and support for the implementation of technological and pedagogical innovations.	RCPS Professional Development Calendar, RCPS Digital Learning library, ITRT planning logs; RCPS Learning Resource Zone
2. Provide resources and support to meet or exceed the Standards of Quality staffing requirements for Instructional Technology Resource Teachers.	Maintain or exceed the current 1/1000 ITRT to student standard.
3. Provide timely and effective technical support to ensure that the infrastructure and technology devices are maintained properly.	Utilization of the Trouble Ticket system and summary reports, maintain or exceed the current 1/1000 IT staff to student standard.

Objective 4.3: Identify and disseminate information and resources that assist educators in selecting authentic and appropriate tools for all grade levels and curricular areas.

Strategies	Measures/Evaluations
1. Provide resources and support to assist instructional staff in the integration innovative and emerging technologies and their applications in learning environments.	RCPS Professional Development Calendar, RCPS Digital Learning library
2. Evaluate a variety of personal computing devices in preparation for future implementation.	Evaluation data

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

Objective 5.1: Use data to inform and adjust technical, pedagogical, and financial support.

Strategies	Measures/Evaluations
1. Deploy Interactive Achievement online Benchmark tests in grades 2-12.	Formative assessments administered in grades 2-12.
2. Provide resources and support for Language Arts and Math teachers to use Interactive Achievement in the creation and administration of formative assessments.	RCPS Professional Development Calendar, RCPS Digital Learning library; RCPS Learning Resource Zone
3. Provide resources and support to all instructional staff on the use technology to enhance formative assessment techniques.	RCPS Professional Development Calendar, RCPS Digital Learning library; RCPS Learning Resource Zone

Objective 5.2: Provide support to help teachers disaggregate, interpret and use data to plan, improve, and differentiate instruction.

Strategies	Measures/Evaluations
1. Provide training to disaggregate formative assessment data to guide instructional practice.	RCPS Professional Development Calendar, RCPS Digital Learning library; RCPS Learning Resource Zone
2. Use Interactive Achievement to disaggregate, interpret, and use data to guide instructional practice.	Number of Interactive Achievement assessments administered.

Objective 5.3: Promote the use of technology to inform the design and implementation of next generation standardized assessments.

Strategies	Measures/Evaluations
1. Provide resource and support to instructional staff in the use of a variety of technology based assessments.	RCPS Professional Development Calendar, RCPS Digital Learning library; RCPS Learning Resource Zone
2. Explore new and emerging technologies that support classroom instruction with the use of assessment data.	Describe the evaluation process for new and emerging technologies



Planning is a cyclical process. We begin by assessing needs and then turning those needs into goals and objectives, followed by specific strategies and measures. We closely monitor and evaluate our accomplishments resulting in revised needs. Thus, the cycle begins again.

This plan is intended to be a working document to guide daily activities that support instruction. Though the duration of the Educational Plan for Technology is five years, most specific strategies are projected for partial or full completion in the next eighteen to twenty-four months. Long before the two-year mark is reached, the planning cycle will identify new goals and strategies which will be incorporated into individual school plans and revisions to this document. Staff will utilize the Timeline and Fiscal Analysis to continuously monitor our own progress and react accordingly. The elements of this plan will be merged into other school planning efforts to avoid duplication.

Roanoke County Public Schools will continue to monitor trends in emerging technologies and effective practices. We envision additional use of smaller, handheld devices to support and enhance instruction. We anticipate that technology will continue to become smaller, faster, and less costly and will capitalize upon those features as deemed appropriate. The quest to make technology an “invisible partner” in the educational process will continue. We

envision technology seamlessly integrated into the learning process to ensure that all students participate in quality learning experiences necessary to grow, adapt and meet the challenges of a changing world.



Appendix 1: Budget and Timetable

Technology Services Annual Operating Budget 2016-2017

(RCPS will update the budget annually based on available funding.)

Budget Code	Purpose/Use of Funds	Amount
875000	Allotments	\$ 23,840
871100	Equipment (Repair/Replacement of Instructional Equipment)	\$ 146,895
875000	Distance Learning (Maintenance Service Contracts)	\$ 13,000
874000	Information Services (Hardware, software, WAN)	\$ 1,206,830.20
875000	Laptop Initiative (LMS, software, supplies, repairs)	\$ 1,272,409.50
876033	Technology Initiative (SOL Technology Grant)	\$ 726,000

Objective	Strategies	Timetable	Budget Source
1.1: Deliver appropriate and challenging curricula through face-to-face, blended, and virtual learning environments.	1.1.1: Expand virtual course offerings available through the Roanoke County Public School Virtual High School.	Annually	Online Classes budget
	1.1.2: Expand dual enrollment offerings by leveraging higher education partnerships.	Ongoing	N/A
	1.1.3: Expand summer school course offerings to include web-based, personalized learning.	Ongoing	Virtual Summer School budget
	1.1.4 Offer a blended instruction delivery model in Economics and Personal Finance.	Ongoing	N/A
1.2: Provide the technical and human infrastructure necessary to support real, blended, and virtual learning environments.	1.2.1: Meet or exceed the Standards of Quality staffing requirements for Instructional Technology Resource Teachers.	Ongoing	RCPS Classroom Technology budget
	1.2.2: Meet or exceed the Standards of Quality staffing requirements for Information Technology personnel.	Ongoing	RCPS Technology Administration budget
	1.2.3: Maintain and upgrade the network infrastructure to ensure sufficient bandwidth for online learning, collaboration, and testing.	Ongoing	Technology Services budget code 874000
	1.2.4. Develop the Blackboard initiative for grades K-12 by providing universal space for school/home communication and 24/7 learning.	Ongoing	Laptop Initiative budget code 874000
	1.2.5: Provide access to a robust Wireless network, a 1:1 laptop initiative In grades 9-12, interactive whiteboards, and collaborative learning environments.	Ongoing	Technology Services budget code 875000

Objective	Strategies	Timetable	Budget Source
1.3: Provide high-quality professional development to help educators create, maintain, & work in a variety of learner-centered environments.	1.3.1: Provide resources and support for ITRTs, curriculum supervisors, and other professional developers to explore innovative and emerging technologies and their applications in learning environments.	Ongoing	Local Professional Development Funds
	1.3.2: Provide ongoing professional development in the effective use of technology to support real, blended, and virtual learning environments.	Ongoing	Local Professional Development Funds
2.1: Support innovative professional development practices that promote strategic growth for all educators and collaboration with other educators, experts, and students.	2.1.1: Facilitate the development and delivery of professional development opportunities that incorporate peer coaching, mentoring, online training, and reflective practices.	Ongoing	Local Professional Development Funds
	2.1.2: Provide ongoing training for administrators and curriculum supervisors in the effective use of technology and collaborative learning tools.	Ongoing	Local Professional Development Funds
	2.1.3: Support administrators and curriculum supervisors in the evaluation of meaningful technology practices that enhance instruction.	Ongoing	N/A
2.2: Actualize the ability of technology to individualize learning and provide equitable opportunities for all learners.	2.2.1: Provide resources and support for the use of technology to assist all learners.	Ongoing	N/A
	2.2.2: Explore the use of mobile learning devices to enhance learning opportunities.	Ongoing	Laptop Initiative budget code 875000
2.3: Facilitate the implementation of high-quality Internet safety	2.3.1: Identify and disseminate best practices and resources to promote the integration of Internet Safety and security throughout curricula.	Annually	N/A

Objective	Strategies	Timetable	Budget Source
	2.3.2: Support RCPS stakeholders by providing resources, information and workshops on current Internet safety issues.	Ongoing	Local Professional Development Funds
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.	3.1.1: Provide ongoing, personalized and just-in-time resources and support for the implementation of technological and pedagogical innovations.	Ongoing	N/A
	3.1.2: Enhance curricula using Internet sites and software that encourage creativity, collaboration, and problem solving.	Ongoing	N/A
	3.1.3: Provide resources and support to school board, curriculum supervisors, and administrators to develop and evaluate technology policies that effectively balance instructional innovation and safety and security.	Ongoing	N/A
3.2: Ensure that students, teachers, and administrators are ICT literate.	3.2.1: Maintain TSIP certification for all administrators and instructional personnel.	Ongoing	N/A
	3.2.2: Develop and deliver high-quality professional development based on C/T SOLs and NETs standards.	Ongoing	N/A
	3.2.3: Align C/T SOL and NETS*S standards with K-12 curriculum.	2014-2016	N/A

Objective	Strategies	Timetable	Budget Source
	3.2.4: Provide support and resources to instructional staff for the effective integration of ICT Literacies into instruction.	Ongoing	Local Professional Development Funds
3.3: Implement technology-based formative assessments that produce further growth in content knowledge and skills development.	3.3.1: Deploy Interactive Achievement online Benchmark tests in grades 2-12.	Ongoing	Elementary & Secondary Formative Assessment budget
	3.3.2: Provide resources and support for Language Arts and Math teachers to use Interactive Achievement in the creation and administration of formative assessments.	Ongoing	N/A
4.1: Provide resources and support to ensure that every student has access to a computing device.	4.1.1: Provide tools that extend learning capabilities, can be customized to meet individual needs and preferences, and support instruction.	Ongoing	Laptop Initiative budget code 875000
	4.1.2: Evaluate the effectiveness of the 1:1 laptop initiative in grades 7-12.	Annually	N/A
4.2: Provide technical and pedagogical support to ensure that students, teachers, and administrators can effectively access and use technology tools.	4.2.1: Provide ongoing, personalized and just-in-time resources and support for the implementation of technological and pedagogical innovations.	Ongoing	N/A
	4.2.2: Provide resources and support to meet or exceed the Standards of Quality staffing requirements for Instructional Technology Resource Teachers.	Ongoing	RCPS Classroom Technology budget
	4.2.3: Provide timely and effective technical support to ensure that the infrastructure and technology devices maintained properly.	Ongoing	N/A

Objective	Strategies	Timetable	Budget Source
4.3: Identify and disseminate information and resources that assist educators in selecting authentic and appropriate tools for all grade levels and curricular areas.	4.3.1: Provide resources and support to assist instructional staff in the integration innovative and emerging technologies and their applications in learning environments.	Ongoing	N/A
	4.3.2: Evaluate a variety of personal computing devices in preparation for future implementation.	Ongoing	Technology Services budget
5.1: Use data to inform and adjust technical, pedagogical, and financial support.	5.1.1: Deploy Interactive Achievement online Benchmark tests in grades 2-12.	Ongoing	RCPS Elementary & Secondary Formative Assessment budget
	5.1.2: Provide resources and support for Language Arts and Math teachers to use Interactive Achievement in the creation and administration of formative assessments.	Ongoing	N/A
	5.1.3: Provide resources and support to all instructional staff on the use technology to enhance formative assessment techniques.	Ongoing	N/A
5.2: Provide support to help teachers disaggregate, interpret and use data to plan, improve, and differentiate instruction.	5.2.1: Provide training to disaggregate formative assessment data to guide instructional practice.	Ongoing	Technology Services budget
	5.2.2: Use Interactive Achievement to disaggregate, interpret, and use data to guide instructional practice.	Ongoing	N/A
5.3: Promote the use of technology to inform the design and implementation of next generation standardized assessments.	5.3.1: Provide resource and support to instructional staff in the use of a variety of technology based assessments.	Ongoing	N/A
	5.3.2: Explore new and emerging technologies that support classroom instruction with the use of assessment data.	Ongoing	N/A

Appendix 2: Acceptable Use Policy

The Internet is an electronic medium connecting computers and users all over the world. Students and teachers use the Internet as a learning tool to gather and evaluate information from multiple sources as well as to communicate and collaborate with individuals both within and outside the classroom. In the hands of skillful teachers who plan thoughtfully, technology is leveraged to transform lessons into engaging and purposeful learning experiences.

The School Board provides a computer system, as defined below, to catalyze the acquisition of knowledge and the development of 21st century skills: collaboration, communication, critical thinking, and creativity. Technology and digital resources are powerful tools for engaging and purposeful learning, but they are tools that must be used responsibly and ethically within the school community. All users bear the responsibility of cultivating and enforcing the principles of digital citizenship when using technology and digital resources.

The term computer system includes, but is not limited to, hardware, software, online resources, network infrastructure, data, communication lines and devices, terminals, printers, CD-ROM devices, flash drives, servers, computers, the internet, mobile devices (both personal and school owned) and other internal or external networks.

All use of the Division's computer system must be (1) in support of education or research and be consistent with the educational objectives of the Division, or (2) for legitimate school business. Use of the computer system is a privilege, not a right. Any communications or materials generated using the district network, including email, instant or text messages, social networking, or files deleted from a user's account, may be monitored, read, and/or archived by school officials,

The Division 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 material 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:
 - i. child pornography as set out in Va. Code 18.2-374.1:1 or as defined in 18 U.S.C. 2256;
 - ii. obscenity as defined by Va. Code 18.2-372 or 18 U.S.C. 1460; and
 - iii. 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 the Division's computers;
4. provisions establishing that all usage of the computer system may be monitored;
5. provisions designed to educate students and employees about digital citizenship, including interacting with students and other individuals on social networking websites and in chat rooms and cyberbullying awareness and response;
6. provisions designed to prevent unauthorized online access by users, including "hacking" and other

- unlawful online activities;
- 7. provisions prohibiting the unauthorized disclosure, use, and dissemination of photographs and/or personal information of or regarding minors; and
- 8. a component on Internet safety for students that is integrated in the Division's instructional program.

Use of the School Division's computer system shall be consistent with the educational or instructional mission or administrative function of the Division as well as the varied instructional needs, learning styles, abilities and developmental levels of students. The Division's computer system is not a public forum.

Each teacher, administrator, student and parent/guardian of each student shall sign the Acceptable Computer System Use Agreement, before using the Division's 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.



Acceptable Computer System Use 6.42AR

Revised June 12, 2014

Last Reviewed May 22 2014

I. Purpose:

To ensure that all use of the Roanoke County 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, but is not limited to, hardware, software, online resources, network infrastructure, data, communication lines and devices, terminals, printers, CD-ROM devices, flash drives, servers, computers, the Internet, mobile devices (both personal and school owned), and any other internal or external network.

II. Regulations:

Computer System Use: Terms and Conditions

A. 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. Even though the purpose of using the computer system may be acceptable, such use may not occur in a manner that otherwise is in violation of School Board policy or administrative regulations.

B. Privilege

The use of the Division's computer system is a privilege, not a right.

C. Unacceptable Use

Each user is responsible for his or her actions on the computer system. Prohibited conduct includes but is not limited to:

1. using the network for any illegal or unauthorized activity, including violation of copyright or contracts, or transmitting any material in violation of any federal, state or local law;
2. sending, receiving, viewing or downloading illegal material via the computer system;
3. unauthorized downloading of software or files;
4. using the computer system for private financial or commercial gain;
5. wastefully using resources, such as file space;
6. gaining unauthorized access to resources or entities;
7. posting material created by another without his or her consent;
8. submitting, posting, publishing or displaying any obscene, profane, threatening, illegal or other inappropriate material;
9. using the computer system while access privileges are suspended or revoked;
10. vandalizing the computer system, including destroying data by creating or spreading viruses or by other means;
11. intimidating, harassing, bullying, exploiting or coercing others;

12. threatening illegal or immoral acts;
13. capturing the image of someone else without his or her permission;
14. using mobile devices in restrooms or locker rooms;
15. using or impersonating the username and password of another user;
16. forging, intercepting, or interfering with email messages;
17. using the computer system to disrupt the learning or safety of others;
18. reading, modifying, or deleting data owned by others without their permission;
19. attempting to circumvent or interfere with administrative passwords and security measures or otherwise hacking into the computer system.

D. Digital Citizenship

Each user must abide by the norms of digital citizenship, including the following:

1. Users will be polite in all interactions.
2. Users will keep their username and password protected and will not share this information with others.
3. Users will always use appropriate language. The use of obscene, lewd, profane, threatening or disrespectful language is prohibited.
4. Users will not post personal information other than directory information as defined in Policy 7.09 (Student Records) about themselves or others.
5. Users will respect the computer system's resource limitations by not downloading or streaming content that may interfere with other users' access to the network.
6. Users will utilize the computer system with proper procedures that ensure no harm to others or themselves.

E. 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. 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 computer virus protection procedures.

F. Vandalism

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

G. Charges

The school division assumes no responsibility for any unauthorized charges or fees as a result of using the computer system, including telephone, data, or long-distance charges.

H. Email

The School Division's email system is owned and controlled by the School Division. The School Division may provide email to aid students and staff in fulfilling their duties and as an education tool. Email is not private. If students are given access to any type of email or communication system administered by Roanoke County Public Schools, such communications may be monitored. The email of staff may be monitored and accessed by the School Division. All email may be archived. Unauthorized access to an email account by any student or employee is prohibited. Users may be held responsible and personally liable for the content of any electronic message they create or that is created under their account or password. 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.

I. Enforcement

Software will be installed on the Division's computers having Internet access to filter or block internet access through such computers to child pornography and obscenity. The online activities of users 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.

Administrative Guidelines for Use of Electronic Mail

Number 6.42b

Adopted August 14, 2008

Purpose:

For the safety and security of all, it is prudent that we delineate guidelines for use of telecommunications by Roanoke County Public School personnel and students.

Background:

Telecommunication has become a valuable tool for both administration and instruction. The Roanoke County Public Schools e-mail program is widely used by staff in all schools.

Guidelines:

- A. Computers, software (including e-mail), and network resources (including the Internet) are provided for instructional and administrative use by Roanoke County Public School personnel and students.
- B. Personal use of e-mail is permitted providing that such use does not in any way detract from the performance of assigned duties.
- C. Teachers and students should use appropriate language at all times.

- D. The RCPS e-mail system is not to be used for any commercial purpose not directly related to school business.
- E. Bulk e-mails are prohibited. Only groups with a common purpose or goal may be sent mail as a group.
- F. Forwarding jokes, graphics, or stories not related directly to instruction or administration is prohibited.
- G. Shared calendars and folder should be utilized for announcements of interest to large groups of Roanoke County employees. Contact your Technology Resource Teacher for information about using this feature.
- H. Do not download attachments from any unknown or untrusted source. This is a major method of virus transmission
- I. Confidential student or staff information should not be communicated via e-mail or stored on any computer that is not password protected. It is the responsibility of all employees to ensure confidentiality of electronic information.

E-mail is a very powerful tool for effective communication; however, teachers and staff should not communicate with students via this medium without the knowledge and consent of parents. Teachers who assign and utilize e-mail accounts for students shall have written permission from parents.

Staff should never use e-mail to communicate confidential student or employee information or to discuss personnel matters. These regulations are being implemented for the protection of our staff and students.

Administrative Guidelines for Publishing on the World Wide Web
Number 6.42c
September 26, 2002

I. Purpose:

To insure that the pages published on the Web by schools are appropriate, relevant, and do not violate individual rights or Roanoke County School policies, the following guidelines have been developed. Please note that before student names and/or pictures can be included on a school web page, a release form must be completed. Each school may develop a release form that meets the individual school needs.

Information presented on RCPS web sites and links must be established for an educational purpose, and must adhere to RCPS Board Policies and Regulations and the RCPS Acceptable Use Policy (AUP) including, but not limited to, policies relating to diversity, controversial issues, and student organizations. All developers of web sites are to establish a

periodic review cycle to ensure timely and accurate information is available for the user or site visitor. All links to the World Wide Web are to be verified on a regular basis.

II. Background:

The World Wide Web represents an opportunity for Internet users around the world to collect and share a virtually limitless amount of information. Current technologies make it possible for Roanoke County Public Schools to participate in this information sharing. Both Roanoke County and Roanoke County Public Schools have sites on the Web. Each school is encouraged to develop a site as well. The purpose of these web pages is to publicize and inform others of activities and programs. A web page for a school is accessible to millions of users around the world and as such will represent that school in the global community of Internet users.

III. Guidelines:

- A. Web pages for each school or department MUST be viewed and approved by the building administrator or his/her designee. Just as they are responsible for the quality of printed materials that leave their sites, administrators are responsible for the quality of material published over computer networks distributed from their sites.
- B. It is imperative that each school webmaster and/or principal insure the accuracy of each web page. Check web pages for spelling and grammar errors.
- C. Photographs of individual students will not be identified by first and last name. Group photographs (such as team pictures) will not identify individual students. Use of student photographs requires specific written consent which may be included on the media release form at the beginning of the school year.
- D. School pages shall not be used as a forum for expressing opinions on political, religious or other sensitive topics.
- F. Documents may not contain objectionable material or point directly or indirectly to objectionable material.
- G. Student home addresses, phone numbers and/or email addresses shall not be posted on any web page.
- H. No unlawful use of copyrighted materials may be used.
- I. Each school or department home page shall contain the following disclaimer: "We have made every reasonable attempt to insure that our web pages are educationally sound, are up-to-date, and do not contain links to any questionable material or anything that can be deemed in violation of the RCPS Acceptable Use Policy. If you believe this material is not in compliance, please contact the Webmaster."
- J. Sites shall not access CGIs, graphics, or other items that are outside the location of their web site server.
- K. Do not use the server to store files for future use. Upload only the files that currently make up the website. DELETE any unused or outdated files.

IV. Standards (mandatory)

- A. Links contained on school pages must be appropriate and relevant to the curriculum and purposes of the school site.
- B. Each school site shall include a link to the Roanoke County Public Schools website. The Roanoke County Public Schools site will include links to the Roanoke County site and approved school pages.
- C. Each department site shall include a link to the school's home page.
- D. One staff member in the school will be designated to be responsible for the maintenance of the school's website. This individual will be responsible for checking links from the pages at least once per month to verify that links are appropriate.
- E. School and department pages shall not include information about or references to other departments or schools without the consent of those schools or departments.
- F. Each home page shall have the school name and address, contact person, telephone number.
- G. Each web home page MUST contain the date the page was last updated, and a link to the webmaster's RCPS email address.
- H. All time-sensitive information (calendars, special event descriptions, etc.) must be kept current.
- I. Graphics may be composed in any program but must be converted to GIF or JPEG/JPG format and optimized for web use.
- J. All image files must be 20k or less.
- K. All pages must have page titles.
- L. Provide a text equivalent for every non-text element. This includes images, graphical representations of text (including symbols), animations, applets and programmatic objects, frames, scripts, images used as list bullets, sounds, stand-alone audio files, video.

V. Recommended Guidelines

- A. All image files should be kept in the "images" folder. This includes any photos or custom graphics.
- B. Graphic file names should be eight-characters or less. Graphic file names must be followed by a period (dot) and an appropriate extension.
 - a. Examples - webpict.gif webpict.jpg
- C. Please follow these conventions when naming text files:
- D. Never use spaces in file names:
 - a. Incorrect: jane doe.html
 - b. Correct: janedoe.htm, jane_doe.htm, janed.htm
- E. Use only letters, numbers, underscores, hyphens, or periods in file names:
 - a. Incorrect: jane/does.htm, jane~doe.htm
 - b. Correct: janedoe.htm, jane_doe.htm, janed.htm
- F. Never end a text file with anything other than .htm (if created on a PC's) or .html (if created on a MAC):

- a. Incorrect: jane.htm3, jane.homepage
- b. Correct: jane3.htm, janehome.html

G. Pages are to be designed utilizing the Yale Style Guide.

H. Browser plug-ins, java script, embedded elements, etc., should be used with care and consideration for audience, bandwidth availability, and increasing the effectiveness of content presentation.

I. 40k or less (load time less than 20 seconds) is the suggested size for each individual web page and its associated elements.

Acceptable Use Policy (AUP) For Mobile Computers

Number 6.42d

Last Revised June 12, 2014

Last Reviewed May 22, 2014

I. Mobile Devices Owned by the School Division

The following specific regulations apply to mobile devices (portable devices including laptops) assigned to students for use both in and out of school. These regulations supplement those set forth in the Acceptable Use Policy (AUP) of the School Division's computer system:

- A. All provisions of the Roanoke County Public Schools (RCPS) Acceptable Use Policy must be observed by students using mobile devices both in and outside of school.
- B. ONLY authorized educational programs installed by RCPS staff may be used on RCPS Roanoke County mobile devices assigned to students.
- C. Students will not download, install or play games, music or video unless directly related to classroom instruction.
- D. E-mail and Instant Messaging are prohibited in school unless under the direct supervision of a teacher and for a classroom instruction purpose.
- E. Students will not attempt to download, install, or use any operating system or browser that is not preinstalled on the mobile device.
- F. Students must observe all rules for downloading and uploading of files when on the school network.
- G. Students must handle and transport mobile computers responsibly; the screen should be closed before moving.
- H. Students will not remove any part of the computer except the main battery and the power adaptor.
- I. Any damage determined by RCPS Information Systems staff to be intentional will be charged to the student (parts and labor up to the full replacement value of the computer.)
- J. Students will not add or remove labels; no marker, paint, glue, stickers or other substance is to be placed on the computer.

K. Students are responsible for keeping devices safe and secure. The student assumes the risk of loss, theft, destruction, or damage and is responsible for repair or replacement cost.

II. Use of Personal Mobile Devices

The following regulations apply specifically to the use of personal mobile devices and are intended to supplement those set forth in the Acceptable Use Policy (AUP) of use of the School Division's computer system. Regulations regarding the use of personal mobile devices apply to use of such devices on school property or at school-sponsored activities.

- A. As part of its Bring Your Own Device (BYOD) program, Roanoke County Public Schools allows students and staff to use privately-owned mobile electronic devices for educational or other school-related purposes.
- B. All provisions of the RCPS AUP must be observed by students or staff using personal mobile devices while on school property or while participating in a school-sponsored activity. In addition, staff members should see School Board Policy 5.56 regarding Standards of On-Line Conduct for Employees.
- C. The use of personal mobile devices is a privilege; not a right.
- D. Personal mobile devices are brought to school at the student's and parents' own risk. RCPS is not responsible for loss, theft, damage, or other associated cost of any personal mobile device and students are responsible for securing their device at all times.
- E. RCPS staff is not allowed to store, support, repair, or troubleshoot personal mobile devices.
- F. Students may use personal mobile devices only for learning activities under the direct supervision of a teacher. All other use is prohibited (see Policy 8.01.04 for other exceptions).
- G. No personal mobile device may be connected to the RCPS network via a cable. Staff network access is only provided via Wi-Fi access.
- H. Wireless ad-hoc or peer-to-peer networking is prohibited.
- I. Personal mobile devices must be kept in silent mode unless being used with teacher permission for a learning activity.
- J. The School Division reserves the right to inspect personal mobile devices and their content if reasonable suspicion exists that School Division policies or local, state, or federal laws have been violated. Such inspection may be limited in scope, as allowed for by current statute and case law.

III. Enforcement

Violation of these rules may result in any of the following disciplinary procedures: conference with student, conference with parents, in-school detention, and loss of computer privileges, suspension, expulsion, or criminal charges.

Internet Safety and Digital Citizenship

2007 6.42 AR – E

Revised June 12, 2014

Last Reviewed May 22, 2014

Administrative Guidelines for Internet Safety and Digital Citizenship

I. Purpose:

To insure safety for all users of the Roanoke County Public Schools network, a comprehensive program of Internet Safety and Digital Citizenship is a critical element of the division's Acceptable Use Policy. CIPA compliant filtering systems are in place to minimize exposure to illegal or inappropriate information while on the Internet. Guidelines intended to ensure the safety of all are included in the policies for students and staff.

II. Regulations:

The following specific regulations exist to protect both employees and students utilizing the RCPS network:

- A. All students and their parents are required to read and sign the AUP annually.
- B. All staff members sign the AUP upon initial employment and when revisions are made to the AUP.
- C. Parent meetings are held regularly to educate and inform parents of potential dangers both in and out of school. Written materials for parents are available via the RCPS web site. Potential dangers of which parents should be aware will be posted on the RCPS web site and in school newsletters.
- D. A comprehensive program of Internet Safety and Digital Citizenship is in place in grades K-12 and will be reviewed annually. This program will be integrated into all curricular areas and updated as needed to provide adequate and timely instruction in all aspects of Internet Safety and Digital Citizenship. The program delineates the roles and responsibilities of all stakeholders.
- E. A program of staff development will include annual review of these policies and curriculum by all professional staff as well as periodic updates via school-based meetings, web-based communications, and e-mail news regarding potential dangers or issues that should be addressed.
- F. The RCPS Technology Advisory Committee will annually review this policy and provide input regarding needed revisions.. This committee will include parents, students, teachers, administrators, school counselors, business partners, School Board members, and representatives from the local criminal justice system.

Appendix 3: Internet Safety Plan

Overview

The Internet is one of many tools that Roanoke County Public Schools uses to support educational excellence. From informational sites to collaborative endeavors, it offers a wealth of educational opportunities. Students must, however, understand the inherent dangers associated with Internet use. Roanoke County Public Schools supports Internet Safety education in grades K-12 in compliance with Va. Code § 22.1-70.2.

A recent needs assessment indicates that approximately 12% of RCPS students report being the victim of cyberbullying, while approximately 20% report receiving inappropriate text messages. Classroom teachers, Guidance Counselors, Library Media Specialists, and ITRTs work together to create, evaluate, and deliver timely Internet Safety lessons. Updated lessons and activities are available to all RCPS staff via the RCPS Internet Safety curriculum.

Evaluation of the AUP and the RCPS Internet Safety program is an ongoing process. The RCPS Technology Advisory Committee comprised of school personnel, community stakeholders, and students review these documents annually and make recommendations for necessary updates. ITRTs evaluate and update Internet Safety resources regularly. Recent updates to our program include:

RCPS Internet Safety K-12 Curriculum: The Roanoke County Public Schools ITRT team regularly reviews and makes updates to the Internet Safety curriculum. The K-12 curriculum, summarized below, offers lessons and activities on Internet Safety, Digital Citizenship and ICT Literacy. It is available on our Internet Safety Lessons page http://www.rcs.k12.va.us/pages/Roanoke_CPS/Departments/Technology/Internet_Safety and summarized below.

RCPS K-12 Internet Safety Curriculum

Elementary Curriculum

Kindergarten

Focus: General Safety
Objectives: Students will develop an awareness of the Internet
Students will identify rules for computer use and safety online

Sample Activities: Commonsense Media: Going Places Safely
NetSmartz : NetSmartz Generation
NetSmartz: Know the Rules

First Grade

Focus: Appropriate Uses of Computers
Objectives: Students will identify appropriate computer practices

Sample Activities:
Commonsense Media: Staying Safe Online
Commonsense Media: Screen Out the Mean
NetSmartz: Be Safer Online

Second Grade

Focus: Privacy on the Internet
Objectives: Students will recognize the need for privacy when using the Internet
Students will understand the importance of telling a trusted adult.

Sample Activities: Commonsense Media: Keep it Private
NetSmartz: It's OK to Tell
NetSmartz: Beat the Tricks

Third Grade

Focus: Privacy on the Internet
Objective: Students will understand that personal information should not be shared
Students will understand the need for strong passwords

Sample Activities: NetSmartz: The Boy Who Loved IM
NetSmartz: Clicky's Stolen Song
Commonsense Media: Powerful Passwords

Fourth Grade

Focus: Personal Safety on the Internet
Objective: Students will identify strategies to maintain personal safety online
Students will understand the basic principles of ownership

Sample Activities: Commonsense Media: Whose Is It, Anyway?
NetSmartz: Bad Netiquette Stinks
Commonsense Media: Digital Citizenship, Rings of Responsibility

Fifth Grade

Focus: Computer Ethics; Personal Safety
Objective: Students will demonstrate an understanding of safe online practices

Sample Activities: NetSmartz: Cyberbullying
Commonsense Media – What is Cyberbullying?
NetSmartz: Terrible tEXt
Commonsense Media: Talking Safely Online

Middle School Curriculum

Sixth Grade

Focus: Cyberbullying; Copyright
Objective: Students will demonstrate an understanding an AUP.
Students will demonstrate an understanding of ways to deal with and avoid cyberbullying.

Sample Activities: Ryan Halligan Video
NetSmartz: You Can't Take it Back
Commonsense Media: Be Upstanding
Commonsense Media: Cyberbullying: Crossing the Line
Commonsense Media: A Creator's Rights
Teaching copyright laws in Middle School

Seventh Grade

Focus: Safety and Security Online
Objective: Students will consider some security challenges related to Internet use.
Students will develop good messaging manners.

Sample Activities: NetSmartz Amy's Choice
Commonsense Media: Scams and Schemes
Commonsense Media: Which should be me?
NetSmartz: 6 Degrees of Information
NetSmartz: Your Photo Fate
Commonsense Media: Safe Talk Online

Eighth Grade

Focus: Computer/Internet Ethics
Objective: Students will understand ethics as related to appropriate behaviors and manners in cyberspace.

Sample Activities: Commonsense Media: Rework, Reuse, Remix
NetSmartz: Two Kinds of Stupid
Commonsense Media: The Reality of Digital Drama
Commonsense Media: Trillion Dollar Footprint

High School Curriculum

9th Grade

Focus: Cyber Ethics
Objective: Students and their parents will understand the importance of ethical computer behavior.

Activity: All RCPS students and parents attend a mandatory laptop orientation before participating in the RCPS one-to-one initiative.

10th Grade – 12th Grade

Focus: Current safety and ethical issues
Objectives: Students will identify safe and unsafe online practices
Students will evaluate the relevancy of online materials
Students will evaluate issues surrounding online privacy
Students will evaluate ethical decisions regarding copyright and plagiarism
Students will evaluate ethical decisions regarding Cyber Security
Students will evaluate ethical issues surrounding Cyber Citizenship

Activities: Internet Safety lessons are incorporated into classroom instruction and documented in lesson plans.

Roles and responsibilities for division personnel, students, and community stakeholders: The roles and responsibilities for all RCPS stakeholders have been updated to include ICT Literacies. This update is available on the RCPS Internet Safety website http://www.rcs.k12.va.us/pages/Roanoke_CPS/Departments/Technology/Internet_Safety and is summarized below.

Roles and Responsibilities of RCPS Stakeholders

School Board

- Review and approve RCPS Policy
- Understand the unique benefits and cautions involved in the educational web.
- Support exploration of emerging technologies to enhance teaching and learning

Superintendent

- Understand the unique benefits and cautions involved in the educational web.
- Provide leadership to administrators, teachers and students who use technology for learning.
- Be aware of current legal and ethical implications of technology use in education.
- Understand the Internet's educational advantages and how it is used throughout the division.

Administrators

- Oversee all aspects of the Internet Safety program within their building
- Understand how technology enables a variety of measures that can support both formative and summative ends.
- Foster the use of technology to support learning in new ways.
- Provide professional development opportunities for staff

Roles and Responsibilities of RCPS Stakeholders	
Instructional Staff	<ul style="list-style-type: none"> • Uphold all tenants of the RCPS AUP • Provide Internet safety and ITC literacy instruction • Monitor the student use of technology • Participate in available professional development • Utilize available technologies to develop critical thinking skills and extend capabilities
ITRTs	<ul style="list-style-type: none"> • Explore emerging technologies and their implications for teaching and learning. • Provide high quality professional development • Support Instructional staff in the effective integration of technology into curriculum. • Model acceptable technology use.
Library Media Specialists	<ul style="list-style-type: none"> • Provide information and instruction on safe internet use and the evaluation of online resources. • Support curricular goals • Model acceptable technology use.
Resource Officers	<ul style="list-style-type: none"> • Serve as a resource for teachers on Internet Safety topic • Participate in available professional development
Guardians	<ul style="list-style-type: none"> • Guardians can provide the best protection for their children and help reinforce the principles learned in the classroom. • Families should reach agreements about acceptable Internet activity and content. • Model acceptable technology use.
Students	<ul style="list-style-type: none"> • Uphold all tenants of the RCPS Acceptable Use Policy. • Participate in Internet Safety, Digital Citizenship, and ICT Literacy lessons

Measures for Future Implementation: The RCPS Tech Advisory Committee meets, both in face to face meetings and via our wiki: <http://rcpstac.wikispaces.com/>. This committee, comprised of administrators, teachers, parents, community members, and students, advise RCPS on matters regarding the laptop program, the Internet Safety Plan, and measures in the AUP.

RCPS data and network security: The RCPS Infrastructure is available has recently been updated to include a secure network, for RCPS personnel and students, and a guest network that allows for personal mobile devices to be used within our district. Separate networks support current RCPS security goals. General activity is monitored and data and electronic communications are backed up on a regular basis. The secure network is an encrypted

connection to protect data from unknown viruses found on unapproved devices. Both systems have real time monitoring.

Ongoing professional development opportunities for each stakeholder group: Internet safety professional development is available to stakeholders within the RCPS district via workshops, newsletters, and our Internet Safety website. A recent survey of RCPS Instructional personnel indicates that 5% feel unprepared to teach Internet Safety and 40% feel like they would benefit from additional training. In addition to traditional workshops offered to RCPS instructional personnel, individual learning modules that focus on Internet Safety and ICT Literacies are currently being developed and will be available via Blackboard.

Community outreach activities that are consistent with the program goals: RCPS participates regularly in community outreach events. Internet safety educational workshops are available to PTAs and community groups. Safety information is available via traditional methods like the student handbook, newsletter information, and our Internet Safety website, as well as through social media channels such as the RCPS Facebook Page (<http://www.facebook.com/RoanokeCoPublicSchools>) and Twitter (<http://twitter.com/rkecoschools>).

