Technology Plan 2015-20

Our school continues to implement technology for our students, teachers and staff to enhance learning activities and to improve school support services.
Acknowledgments

Downsville Central School District
Technology Planning Committee Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. John Evans</td>
<td>Superintendent of Schools</td>
</tr>
<tr>
<td>Lynne VanValkenburg</td>
<td>District Curriculum Coordinator</td>
</tr>
<tr>
<td>Jalene Allen</td>
<td>SRIC Technology Coordinator</td>
</tr>
<tr>
<td>Tim Maguire</td>
<td>Treasurer</td>
</tr>
<tr>
<td>Shelle Reed</td>
<td>Elementary School Teacher</td>
</tr>
<tr>
<td>Stephanie Brock</td>
<td>Spanish Teacher</td>
</tr>
<tr>
<td>James Kane</td>
<td>Secondary School Mathematics Teacher</td>
</tr>
<tr>
<td>Jane Walker-Lloyd</td>
<td>School Library Media Specialist</td>
</tr>
<tr>
<td>Timothy McNamara</td>
<td>PreK-12 Principal</td>
</tr>
<tr>
<td>Juliane Erwin</td>
<td>5/6 Math/Social Studies</td>
</tr>
<tr>
<td>Jeannie Langdon</td>
<td>Staff/Parent Member</td>
</tr>
<tr>
<td>Claudia Townsend</td>
<td>Social Studies Teacher</td>
</tr>
<tr>
<td>Burt Reed</td>
<td>Special Education Teacher</td>
</tr>
</tbody>
</table>
Technology Plan 2015-20

INTRODUCTION

Information & Instructional Technologies are emerging in our district as fundamental support systems for all aspects of our educational and student management.

A BRIEF HISTORY

Informally networked computer systems have been in use at Downsville Central Schools since the late 1980’s. Initially, computer learning labs and administrative support systems were the primary technology applications.

In 2005, Downsville CSD embarked on a multi-year technology initiative to improve the support of instructional uses of computer technology. In November 2005, the district contracted with a Network Systems Engineer to review the school’s informal network system and to make recommendations for implementing an up-to-date information and instructional technology system. Following on these recommendations, the school district implemented key changes, including:

- Personnel changes in technology support
- Updating of classroom and office systems
- Across-the-board consolidation and upgrading of server resources
- Establishment of a fiber-optic backbone in the school campus

In addition, in the summer of 2014 Downsville CSD contracted with the South Central Regional Information Center or SCRIC to provide managed technology services. One of the major improvements made was adding wi-fi access points throughout the building.

TODAY

Since the summer of 2014 Downsville has implemented a distance learning classroom which has given students the opportunity to take AP classes as well as electives they may not have had the opportunity to take otherwise. The district has purchased HP and Samsung Chromebooks, iPads for all teachers as well as some classrooms and new short throw projectors. In order to provide assistive technology for our students with disabilities and allow them to continue participating in the general curriculum, VGo was purchased for our district to support students with attending classes in real time. LEGO Mindstorms has grown within the district in the past couple of years to give students the opportunity to learn how to problem solve and has given exposure to students interested in engineering, programing and robotics. Teachers were given new desktops, along with a new operating system of Windows 7.
TOMORROW
Technology has changed the world in which we live. Information technology permeates every aspect of our daily lives: how we live, work, play, communicate and learn. Today’s world is technologically driven; our economy is truly global, in large part due to advances in technology. Our school is more challenged than ever before to provide a platform for students to develop the skills and strategies for success in a technology-based world. With a primary focus on the new Common Core Learning standards we are mandated to include more technology in our day to day learning and prepare students for college and career. Providing 21st Century skills our students will be more prepared for their future.

In order to increase access to technology, Downsville Central School is working towards a more cloud and web-based instruction. Students and teachers will have access to homework and instruction from home because of this approach.

As year-to-year school planning continues, Downsville Central School remains committed to the continued improvement of information systems to truly expand the world of educational resources available to our students and teachers. Our school community is learning new ways to communicate and share what they have learned among themselves and with other students, locally and globally.

The Downsville Central School District is using information technology for:

- Student Learning
- Facilities Control and Management
- School District Finance
- Staff Development
- Student Information Management
- Student Achievement and Assessment
- Community Outreach
- Home to School Connection
- Multimedia/Multiplatform Communication

Prompted by the threat of data loss during the June 2006 floods in nearby districts, the district management team began a Disaster Planning Risk Analysis. The data is stored off-site at another location. Disaster planning will continue in 2015 as the district relocates the current server closet to a more secure location within the building.

Our plan includes the systematic upgrade of our comprehensive information technology infrastructure and end-user devices. These planned upgrades will make our students 21st century ready with the necessary skills to compete in a technological world, as well as be college and career ready.

This 5-year plan (2015-2020) relies on needs assessment surveys and regular evaluative reviews by the full district technology committee to ensure effective implementation, timeliness and responsiveness to the changing learning environment.
Section One

DOWNSVILLE CENTRAL SCHOOL

Vision Statement For Technology

1. Mission Statement

   Excellence
   Achievement
   Growth
   Lifelong Learning
   Equity
   Strength of Character

OUR BELIEF:

The ongoing investment in technology and the necessary staff development will allow the Downsville Central School District to fulfill its mission. Technology will aid our students and staff in their pursuit of excellence. Used effectively, technology will increase student achievement and contribute to the growth of each individual. At the dawn of the 21st century, technology will enable our students to prepare and handle the necessity of lifelong learning. All students will have equal access to technology and learning environments that create portals to global resources. Downsville Central School District students and staff will use technology for learning purposes in ethical ways.

2. District Vision

   We, the Downsville Central School Community, will be a high-achieving, evolving educational environment responsible for building a foundation of trust, fairness, and consistency by working collaboratively to inspire and nurture each individual’s passion, voice, and character for life-long success.

OUR BELIEF:

The effective use of technology as a learning tool will help us to become a high-achieving school district. Furthermore, we recognize that technology is ever-evolving and new devices will be explored for their usefulness in reaching the vision. We are committed to addressing the needs of students with disabilities and providing our students with equitable access to instruction, materials and assessments. Technology used for learning purposes will, at its best, advance the collaborative efforts of students and staff members. Finally, we understand that machines will never inspire or nurture on their own. Only a competent and caring adult can help students to discover their own passion, voice, and character.
3. The Eagle Way

We will...

- recognize and value individual strengths
- learn from our mistakes
- enforce rules consistently and fairly
- be accountable for our decision and actions
- encourage success in each other
- model respect, responsibility, and a passion for learning

OUR BELIEF:

No one person will be an expert in all technology resources. We will develop individual strengths, provide opportunities to share our learning with one another, and encourage success in each other. We will recognize that in our efforts to embrace technology we will undoubtedly make mistakes. We will choose to see these mistakes as opportunities for learning. We recognize that in addition to providing powerful learning opportunities, technology can also be used in hurtful and unethical ways. We believe that enforcing the acceptable use policy is critical to assuring the proper uses of technology. Additionally we will model respect and responsibility in our electronic interactions with one another. The Downsville Central School District community will demonstrate a passion for embracing all resources that may positively impact student learning.

Our guiding statement: Downsville CSD will implement instructional technology for its students, teachers and staff to enhance learning activities and to improve school support services. On-going assessment and adjustment of the District Technology Plan will foster the innovative application of instructional technology to life-long student learning.
Section Two

Technology Standards, Priorities & Assessment

Downsville Central School commits to following the National Educational Technology Standards and Performance Indicators for Students and Teachers in alignment with relevant computer/technology skills identified in the NYS or Common Core Learning Standards to ensure students are learning the requisite skills of the digital age. New technology curriculum was created in the summer of 2014 for students in grades K-6.

All planning for staff development at Downsville CSD will be aligned to the District PDP and annual school improvement plan, “LINKS”.

We are continually assessing the needs of our district. Based on the results of the assessment, the following priority focus areas were identified:

<table>
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<tr>
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<tbody>
<tr>
<td>Increased Computer Access, including a variety of PC's and Macs</td>
<td>Purchase additional computers  - Laptops  - Library &amp; Classroom Clusters</td>
<td>Review of Purchases</td>
<td>Survey teachers on instructional impact of new equipment</td>
</tr>
<tr>
<td>New Presentation cart</td>
<td>Purchase a functional projector cart that will hold a computer, speaker, laptop</td>
<td>Current one does not hold all equipment and is not functional.</td>
<td>Survey teachers and administrators on impact and function of new equipment</td>
</tr>
<tr>
<td>Compass Learning Software License</td>
<td>Purchase 20 licenses for student use.</td>
<td>Currently using RISE program licenses and will need to purchase own once program ends</td>
<td>Survey teachers and students on instructional impact</td>
</tr>
</tbody>
</table>
| Scheduling Modifications | - School year opening day calendar coordination with Technology Dept.  
- Investigate maximizing use of all computers and lab | - Informal survey of teachers and report back from Technology Department | Survey teachers on instructional impact of new scheduling methods |
<table>
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</thead>
<tbody>
<tr>
<td>Continual Support of Innovative Technology</td>
<td>- Purchase of innovative hardware and software</td>
<td>Review of purchases, demos and training</td>
<td>Survey teachers on instructional impact of new equipment</td>
</tr>
</tbody>
</table>
| Teacher Training and Support | - Utilize Technology Integration | - Training evaluations  
- Usage statistics | |
<table>
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<tr>
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<tbody>
<tr>
<td></td>
<td>Specialist</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>– Staff Development Days</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Training and</td>
<td>– Workshops</td>
<td></td>
<td>– As above</td>
</tr>
<tr>
<td>Support (cont.)</td>
<td>– Peer/team training and support</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>– New teacher training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continued Assessment</td>
<td>– Three regularly scheduled LINKS meetings</td>
<td>2015-2016 Technology Plan; agendas and sign-ins</td>
<td></td>
</tr>
<tr>
<td></td>
<td>where members will discuss technology usage</td>
<td></td>
<td></td>
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</tbody>
</table>
Section Three

Technology Goals & Personnel

The Downsville Central School District places continued emphasis on providing a professional, trained on-site staff to support the expanding scope of instructional and information technology use. The following table provides a history of District Technology Support Personnel.

<table>
<thead>
<tr>
<th>Technology Goal</th>
<th>Technology Personnel and Assessment of Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respond to day-to-day tech issues</td>
<td>Greg Gazdik, Jalene Allen, Tim Maguire with SRIC Support</td>
</tr>
<tr>
<td></td>
<td><em>Respond and resolve; escalate to SRIC Support</em></td>
</tr>
<tr>
<td>Implement new instructional technology</td>
<td>Greg Gazdik, Jalene Allen, Business Office, Building &amp; Grounds with SRIC Support</td>
</tr>
<tr>
<td></td>
<td><em>In response to expressed needs and regular technology replacement</em></td>
</tr>
<tr>
<td>Continue on-going, scheduled updating of data protection safeguards</td>
<td>Greg Gazdik, Jalene Allen, SRIC Support</td>
</tr>
<tr>
<td></td>
<td><em>Weekly monitoring of antivirus, spam firewall, hard disk backup procedure and regular adjustment of workstation settings to maintain secure desktops</em></td>
</tr>
<tr>
<td>Maintain applications software</td>
<td>Greg Gazdik, Jalene Allen, SRIC Support</td>
</tr>
<tr>
<td></td>
<td><em>Systems are maintained with up-to-date patches and upgrades</em></td>
</tr>
<tr>
<td>Implement a new distance learning initiative</td>
<td>Greg Gazdik, Jalene Allen, SRIC Support</td>
</tr>
<tr>
<td></td>
<td><em>Explore scheduled courses available via Distance Learning and schedule electronic field trips</em></td>
</tr>
<tr>
<td>Support student network access</td>
<td>Greg Gazdik, Jalene Allen, SRIC Support</td>
</tr>
<tr>
<td></td>
<td><em>As requested and needed</em></td>
</tr>
<tr>
<td>Maintain equipment and software in a timely fashion</td>
<td>Greg Gazdik, Jalene Allen, SRIC Support</td>
</tr>
<tr>
<td></td>
<td><em>As needed</em></td>
</tr>
<tr>
<td>Control inventory and expedite decommissioning and disposal of equipment</td>
<td>Greg Gazdik, Jalene Allen, SRIC Support, Business Office, Building &amp; Grounds with DCMO &amp; BT BOCES Support</td>
</tr>
<tr>
<td></td>
<td><em>On-going as new units are purchased and as equipment is cycled out for obsolescence</em></td>
</tr>
<tr>
<td>Provide presentation assistance</td>
<td>Greg Gazdik, Jalene Allen, SRIC Support Building &amp; Grounds, AV Coordinator</td>
</tr>
<tr>
<td></td>
<td><em>As needed</em></td>
</tr>
<tr>
<td>Maintain web-based communications</td>
<td>Greg Gazdik, Jalene Allen, Nancy Haynes, SRIC Support</td>
</tr>
<tr>
<td></td>
<td><em>Maintained and updated to reflect all current school activities</em></td>
</tr>
<tr>
<td>Develop the network system and integrate new technology</td>
<td>Greg Gazdik, Jalene Allen, SRIC Support, Vendor Support</td>
</tr>
<tr>
<td></td>
<td><em>The network system is maintained in good working order and meeting user demand through upgrades and capacity improvements.</em></td>
</tr>
<tr>
<td>Manage student data for compliance</td>
<td>Rob Rhinehart, Jalene Allen, SRIC Support</td>
</tr>
<tr>
<td></td>
<td><em>Meet SED compliance for Student Data Warehousing</em></td>
</tr>
</tbody>
</table>
Provide on-going technology training  
Todd Rutan, DCMO BOCES Support  
*As requested and needed*

| Internet Safety | Computer Teacher and Technology Committee  
*Explore and implement curriculum-based Internet safety beginning in SY 2009-10* |

**Technology Goals and Support Overview**
# Section Four

*Technology Funding*

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Technology Funding</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>NYS Aid (Hardware)</td>
<td>1,001</td>
<td>5,724</td>
<td>19,395</td>
<td>2,200</td>
</tr>
<tr>
<td>This aid category covers part of the expenditures for instructional hardware.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>NYS Aid (Software)</td>
<td>39,784</td>
<td>15,112</td>
<td>5,873</td>
<td>5,000</td>
</tr>
<tr>
<td>This aid category covers part of the expenditures for instructional software.</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>BT BOCES RIC and DCMO BOCES</td>
<td>142,367</td>
<td>129,297</td>
<td>129,955</td>
<td>147,409</td>
</tr>
<tr>
<td>This represents Broadband, website maintenance, Distance Learning</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Computer Coordinator salary is included in this amount.</td>
<td></td>
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</tr>
<tr>
<td>PowerSchool support, staff development, Model Schools</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>For 09-10: <strong>ONC BOCES Distance Learning/Virtual Field Trips; Global Connect Messenger System and .26 FTE Technology Integrated Specialist</strong></td>
<td></td>
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<tr>
<td>General Fund Appropriations</td>
<td>10,276</td>
<td>15,688</td>
<td>8,513</td>
<td>7,700</td>
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<tr>
<td>Supplies and repairs</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Federal/State Grant Programs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Title IID</td>
<td>1,147</td>
<td>1,017</td>
<td>890</td>
<td>TBA</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>194,555</td>
<td>166,838</td>
<td>164,625</td>
<td>162,309</td>
</tr>
</tbody>
</table>
Appendix

Appendix A:

*National Educations Technology Standards for Students (NETSS)*

&

*National Educations Technology Standards for Teachers (NETST)*
The ISTE National Educational Technology Standards (NETS•S) and Performance Indicators for Students

1. **Creativity and Innovation**
   Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:
   a. apply existing knowledge to generate new ideas, products, or processes.
   b. create original works as a means of personal or group expression.
   c. use models and simulations to explore complex systems and issues.
   d. identify trends and forecast possibilities.

2. **Communication and Collaboration**
   Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Students:
   a. interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
   b. communicate information and ideas effectively to multiple audiences using a variety of media and formats.
   c. develop cultural understanding and global awareness by engaging with learners of other cultures.
   d. contribute to project teams to produce original works or solve problems.

3. **Research and Information Fluency**
   Students apply digital tools to gather, evaluate, and use information. Students:
   a. plan strategies to guide inquiry.
   b. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
   c. evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
   d. process data and report results.

4. **Critical Thinking, Problem Solving, and Decision Making**
   Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources. Students:
   a. identify and define authentic problems and significant questions for investigation.
   b. plan and manage activities to develop a solution or complete a project.
   c. collect and analyze data to identify solutions and/or make informed decisions.
   d. use multiple processes and diverse perspectives to explore alternative solutions.

5. **Digital Citizenship**
   Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:
   a. advocate and practice safe, legal, and responsible use of information and technology.
   b. exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
   c. demonstrate personal responsibility for lifelong learning.
   d. exhibit leadership for digital citizenship.

6. **Technology Operations and Concepts**
   Students demonstrate a sound understanding of technology concepts, systems, and operations. Students:
   a. understand and use technology systems.
   b. select and use applications effectively and productively.
   c. troubleshoot systems and applications.
   d. transfer current knowledge to learning of new technologies.

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The ISTE
National Educational Technology Standards (NETS•T) and Performance Indicators for Teachers

Effective teachers model and apply the National Educational Technology Standards for Students (NETS•S) as they design, implement, and assess learning experiences to engage students and improve learning; enrich professional practice; and provide positive models for students, colleagues, and the community. All teachers should meet the following standards and performance indicators. Teachers:

1. Facilitate and Inspire Student Learning and Creativity
   Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments. Teachers:
   a. promote, support, and model creative and innovative thinking and inventiveness
   b. engage students in exploring real-world issues and solving authentic problems using digital tools and resources
   c. promote student reflection using collaborative tools to reveal and clarify students’ conceptual understanding and thinking, planning, and creative processes
   d. model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments

2. Design and Develop Digital-Age Learning Experiences and Assessments
   Teachers design, develop, and evaluate authentic learning experiences and assessments incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the NETS•S. Teachers:
   a. design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity
   b. develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress
   c. customize and personalize learning activities to address students’ diverse learning styles, working strategies, and abilities using digital tools and resources
   d. provide students with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching

3. Model Digital-Age Work and Learning
   Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society. Teachers:
   a. demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations
   b. collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation
   c. communicate relevant information and ideas effectively to students, parents, and peers using a variety of digital-age media and formats
   d. model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

4. Promote and Model Digital Citizenship and Responsibility
   Teachers understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices. Teachers:
   a. advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources
   b. address the diverse needs of all learners by using learner-centered strategies and providing equitable access to appropriate digital tools and resources
   c. promote and model digital etiquette and responsible social interactions related to the use of technology and information
   d. develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital-age communication and collaboration tools

5. Engage in Professional Growth and Leadership
   Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources. Teachers:
   a. participate in local and global learning communities to explore creative applications of technology to improve student learning
   b. exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community building, and developing the leadership and technology skills of others
   c. evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning
   d. contribute to the effectiveness, vitality, and self-renewal of the teaching profession and of their school and community
Successful technology plans align the overall education or library service improvement objectives with the following five criteria. To qualify as an approved Technology Plan for a Universal Service Program discount (e-Rate), the plan must meet these criteria. It is critical that technology planning not be viewed or treated as a separate exercise dealing primarily with hardware and telecommunications infrastructure. There must be strong connections between the proposed physical infrastructure of the information technology and the plan for professional development, curriculum reform, and library service improvements.

Please check that your district Technology Plan addresses the following requirements and state the page(s) of your plan which show compliance.

1.) Our plan establishes clear goals and realistic strategy for using telecommunications and information technology to improve education or library services.

Page references: 3, 4, 5

2.) Our plan has a professional development strategy to ensure that staff knows how to use the new technologies to improve education or library services.

Page references: 6, 7

3.) Our plan includes an assessment of the telecommunication services, hardware, software, and other services that will be needed to improve education or library services.

Page references: 3, 8, 9
4.) Our plan provides for a sufficient budget to acquire and maintain the hardware, software, professional development, and other services that will be needed to implement the strategy for improved education or library services.

5.) Our plan includes an evaluation process that enables the school or library to monitor progress toward the specified goals and make mid-course corrections in response to new developments and opportunities as they arise.

Please send this completed form along with two copies of your Technology Plan to the DCMO BOCES c/o Rod Sutton. (E-mailing your plan as a.doc or .pdf would be appreciated as well).

Authorized District Signature

phone

date

e-mail address

Authorized DCMO BOCES Signature (attesting to Tech Plan compliance)

date

Authorized Broome-soga BOCES Signature

date

http://www.universalservice.org/sl/