Goal 1

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

Objective 1.1 All students will successfully participate in online and/or blended courses by the time of graduation.
   Strategy 1.1.1 Provide students access to individual online courses for credit.
   Strategy 1.1.2 Provide the infrastructure, software portal resources, and educator training necessary to support online learning for students.
   Strategy 1.1.3 Provide a comprehensive fully-online course program for K-8 students.
   Strategy 1.1.4 Provide multiple 12th grade courses online specifically to free students’ schedules for additional career development and exploration opportunities.

Objective 1.2 Students will be engaged by experts, professionals and other students through virtual field trips and global classroom connections PreK-12.
   Strategy 1.2.1 Provide the infrastructure, hardware, software, instructional materials, and the educator training necessary for video-conferencing in all schools.

Objective 1.3 Educators and students will become proficient in safe and productive Internet use.
   Strategy 1.3.1 Provide Internet safety learning opportunities and curricular resources to both teachers and students including instruction related to the safe and responsible use of social media.
Goal 2

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

Objective 2.1 The curriculum will reflect effective integration of technology.
  Strategy 2.1.1 Provide training and coaching support to curriculum writing and revision teams to improve technology integration.
  Strategy 2.1.2 Regularly revise curriculum to add, modify, and remove technology integration components to reflect division academic emphases.
  Strategy 2.1.3 Gather data on usage of specific technological tools and resources and feed that data to curriculum writing and revision teams.

Objective 2.2 Educators will develop skills in interactive, engaging, adaptive instruction.
  Strategy 2.2.1 Provide job-embedded professional development to create and implement content-specific technology-infused learning activities.
  Strategy 2.2.2 Provide a variety of online learning resources for educators to improve their instructional skills voluntarily with flexible scheduling.
  Strategy 2.2.3 Provide electronic observation/feedback tools to instructional coaches and administrators to support conversations about effective teaching and learning practices.
  Strategy 2.2.4 Develop the professional competence of educators and administrators using a variety of electronic tools and delivery methods.
Goal 3

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

Objective 3.1 Educators will have access to pedagogical and coaching support for integrating technology into teaching and learning.
   Strategy 3.1.1 Provide instructional technology coaches.
   Strategy 3.1.2 Support innovative teaching and learning initiatives designed by educators by facilitating pilot uses of emerging, experimental, or uncommon technologies in select classrooms.

Objective 3.2 Students will communicate and collaborate with their peers within NNPS and around the world.
   Strategy 3.2.1 Provide learning experiences that promote cross-class collaboration and communication PreK-12 using a variety of electronic tools.

Objective 3.3 Students will be provided with a variety of assistive technologies to ensure diverse learning needs are met.
   Strategy 3.3.1 Provide students access to electronic tools for overcoming specific physical and cognitive barriers to learning.

Objective 3.4 Students will access a variety of electronic tools in their academic work.
   Strategy 3.4.1 Provide and maintain student-use computers in various form factors (desktop, laptop, handheld) at every school site.
   Strategy 3.4.2 Provide and maintain interactive white-boards, projectors, and sound systems in classrooms.
   Strategy 3.4.3 Provide a variety of local- and web-based instructional software resources to classrooms.
   Strategy 3.4.4 Adopt web-based electronic textbooks for courses and maintain an access portal to them for students.
   Strategy 3.4.5 Develop a standing instructional technology planning team to research, review, and facilitate the piloting of new and emergent technologies that could improve teaching and learning.
Objective 3.5 Educators will have access to technical support for all software and hardware in use in classrooms.

- Strategy 3.5.1 Operate a live, on-demand Help Desk to troubleshoot and fix technical problems with electronic tools.
- Strategy 3.5.2 Maintain technical support staff for students and staff based on demand.
- Strategy 3.5.3 Maintain supported applications and platforms per manufacturers’ recommendations.
- Strategy 3.5.4 Create student-run Help Desks in each high school for both teacher and student technical assistance

Objective 3.6 Students and educators will have access to a robust networking system to support academic exploration.

- Strategy 3.6.1 Maintain and upgrade the wired and wireless networks to sufficiently support instructional needs.
- Strategy 3.6.2 Communicate procedures to students and employees for the acceptable use of non-NNPS electronic devices on division networks and promote their instructional uses in classrooms.
Goal 4

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

Objective 4.1 Educators will analyze data to improve instruction and adapt to student needs.
   Strategy 4.1.1 Provide data collection and analysis software, on-demand data reports, and scheduled data reports.
   Strategy 4.1.2 Provide professional development on electronic tools for administrators and instructional coaches to support meaningful conversations about effective teaching and learning practices.

Objective 4.2 Educators will effectively utilize formative and summative assessments to improve instruction and respond to student needs.
   Strategy 4.2.1 Provide efficient and easy-to-use electronic tools to educators to support formative and summative assessment of students.
NNPS Educational Technology Plan 2016 Addendum
Correlation Matrices

<table>
<thead>
<tr>
<th>VDOE Educational Technology Plan Objective</th>
<th>NNPS Educational Technology Plan Addendum Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Provide the technical infrastructure necessary to support formal and informal learning environments.</td>
<td>1.1.1, 1.1.2, 1.1.3, 1.1.4, 1.2.1, 2.2.3, 3.2.1, 3.3.1, 3.4.1, 3.4.2, 3.5.3, 3.6.1, 4.1.1, 4.2.1</td>
</tr>
<tr>
<td>1.2 Provide the human infrastructure necessary to support formal and informal learning environments.</td>
<td>1.1.2, 1.2.1, 1.3.1, 2.1.1, 2.1.2, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 3.1.1, 3.4.5, 3.5.1, 3.5.2, 3.5.4, 3.6.2, 4.1.2</td>
</tr>
<tr>
<td>1.3 Develop sound policies and procedures for the acquisition and management of technologies.</td>
<td>2.1.3, 3.1.2, 3.4.5, 3.5.3, 3.6.1, 3.6.2</td>
</tr>
<tr>
<td>2.1 Deliver appropriate, rigorous, and challenging technology-enhanced curricula to support formal and informal learning experiences.</td>
<td>1.1.1, 1.1.2, 1.1.3, 1.1.4, 1.3.1, 2.1.1, 2.1.2, 2.2.1, 3.1.2, 3.2.1, 3.3.1, 3.4.3, 3.4.4, 3.4.5</td>
</tr>
<tr>
<td>2.2 Provide resources to support personalized learning for all students.</td>
<td>1.1.1, 1.1.2, 1.1.3, 1.1.4, 2.1.1, 2.1.2, 2.2.1, 3.1.2, 3.3.1, 3.4.3</td>
</tr>
<tr>
<td>3.1 Provide resources and applications that encourage creativity, collaboration, and problem solving.</td>
<td>1.1.3, 1.1.4, 1.2.1, 2.1.1, 2.1.2, 2.2.1, 2.2.2, 2.2.4, 3.1.2, 3.2.1, 3.4.3, 3.4.5</td>
</tr>
<tr>
<td>3.2 Develop and evaluate technology policies to effectively balance the need for instructional innovation with safety and security.</td>
<td>3.1.1, 2.1.1, 2.2.1, 3.1.2, 3.4.5, 3.6.2</td>
</tr>
<tr>
<td>4.1 Provide resources and support to ensure that every student has access to a personal computing device</td>
<td>3.4.1, 3.5.3, 3.5.4, 3.6.1, 3.6.2</td>
</tr>
<tr>
<td>4.2 Identify and disseminate information and resources that assist educators in selecting authentic and appropriate tools for all grade levels and curricular areas</td>
<td>1.1.2, 1.2.1, 2.1.1, 2.2.1, 2.2.2, 2.2.3, 3.1.1, 3.4.5, 4.1.2</td>
</tr>
<tr>
<td>5.1 Use data to inform and adjust technical, pedagogical, and financial support</td>
<td>2.1.3, 4.1.1, 4.1.2</td>
</tr>
<tr>
<td>5.2 Promote the use of technology to inform the design and implementation of next-generation standardized assessments</td>
<td>4.1.1, 4.1.2, 4.2.1</td>
</tr>
</tbody>
</table>
# NNPS Educational Technology Plan 2015 Addendum to 2016 Addendum

This matrix denotes the changes from the 2015 addendum to the 2016 addendum.

<table>
<thead>
<tr>
<th>Type of Change</th>
<th>Goal, Objective, or Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Added</td>
<td>Strategy 1.1.4 Provide multiple 12th grade courses online specifically to free students' schedules for additional career development and exploration opportunities.</td>
</tr>
<tr>
<td>Removed</td>
<td>Objective 1.3 Students who receive home bound instruction will participate in learning experiences through the use of technology.</td>
</tr>
<tr>
<td></td>
<td>Strategy 1.3.1 Provide mechanisms and tools for homebound students to participate in learning experiences through a variety of means, including video conferencing, online course websites, and other communication and participatory tools.</td>
</tr>
<tr>
<td>Renumbered from 1.4 and 1.4.1</td>
<td>Objective 1.3 Educators and students will become proficient in safe and productive Internet use.</td>
</tr>
<tr>
<td></td>
<td>Strategy 1.3.1 Provide Internet safety learning opportunities and curricular resources to both teachers and students including instruction related to the safe and responsible use of social media.</td>
</tr>
<tr>
<td>Added</td>
<td>Strategy 2.1.3 Gather data on usage of specific technological tools and resources and feed that data to curriculum writing and revision teams.</td>
</tr>
<tr>
<td>Combined</td>
<td>Goal 3: Afford students with opportunities to apply technology effectively to gain knowledge, develop skills, and create and distribute artifacts that reflect their understanding.</td>
</tr>
<tr>
<td></td>
<td>Goal 4: Provide students with access to authentic and appropriate tools to gain knowledge, develop skills, and create and disseminate artifacts that demonstrate their understandings.</td>
</tr>
<tr>
<td></td>
<td>Note – We combined these goals because we believe you cannot let students apply technology without having given access to that technology in the first place. Therefore, the former Goal 4 objectives and strategies now fall completely under Goal 3.</td>
</tr>
<tr>
<td>Added</td>
<td>Strategy 3.4.4 Adopt web-based electronic textbooks for courses and maintain an access portal to them for students.</td>
</tr>
<tr>
<td>Added</td>
<td>Strategy 3.4.5 Develop a standing instructional technology planning team to research, review, and facilitate the piloting of new and emergent technologies that could improve teaching and learning.</td>
</tr>
<tr>
<td>Added</td>
<td>Strategy 3.5.4 Create student-run Help Desks in each high school for both teacher and student technical assistance.</td>
</tr>
<tr>
<td>Renumbered from Goal 5 to Goal 4</td>
<td>Goal 4: Use technology to support a culture of data-driven decision-making that relies upon data to assess and improve teaching and learning.</td>
</tr>
<tr>
<td></td>
<td>Objective 4.1 Educators will analyze data to improve instruction and adapt to student needs.</td>
</tr>
<tr>
<td></td>
<td>Strategy 4.1.1 Provide data collection and analysis software, on-demand and scheduled data reports, and professional development for educators and administrators.</td>
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<tr>
<td></td>
<td>Strategy 4.1.2 Provide professional development on electronic tools for administrators and instructional coaches to support meaningful conversations about effective teaching and learning teaching and learning practices.</td>
</tr>
<tr>
<td></td>
<td>Objective 4.2 Educators will effectively utilize formative and summative assessments to improve instruction and respond to student needs.</td>
</tr>
<tr>
<td></td>
<td>Strategy 4.2.1 Provide efficient and easy-to-use electronic tools to educators to support formative and summative assessment of students.</td>
</tr>
</tbody>
</table>
Educational Technology Plan 2010-2015

www.nnschools.org/techplan
The Educational Technology Plan Committee was set up utilizing the skills and experiences of individuals from within the school district; (i.e., teachers, administrators, program coordinators, supervisors and technology staff), government and community representatives, school board members and parents.

The process for evaluating the plan was achieved through a series of meetings where participants evaluated the technology survey, goals, strategies, and measures in small group interactions. In addition, individuals with specialized interests and backgrounds were also brought in to assess the functionality of the goals, strategies, and measures.

A web-based site was set up to provide easy access to the working document and several resources to include the Educational Technology Plan for Virginia, the U.S. Department of Education plan, and the NNPS Technology Survey for committee members (http://projects.nn.k12.va.us/techplan/). Committee members also used this site as a blog for any suggestions relating to the plan.

Upon completion of this process, the document was then reviewed by the Senior Administrative Staff and sent to the School Board for approval. In accordance with state guidelines, this plan will be re-evaluated by the Educational Technology Plan Committee on an annual basis and incorporate the findings into the plan over time.
Executive Summary

“Education is the key to America’s economic growth and prosperity and to our ability to compete in the global economy. It is the path to good jobs and higher earning power for Americans. It is necessary for our democracy to work. It fosters the cross-border, cross-cultural collaboration required to solve the most challenging problems of our time.

Under the Obama administration, education has become an urgent priority driven by two clear goals. By 2020:

- We will raise the proportion of college graduates from where it now stands [39%] so that 60% of our population holds a 2-year or 4-year degree.
- We will close the achievement gaps so that all students – regardless of race, income, or neighborhood – graduate from high school ready to succeed in college careers.

These are aggressive goals and achieving them is a sizable challenge. Add to the challenge the projections of most states and the federal government’s reduced revenues for the foreseeable future, and it is clear we need cost-effective and cost-saving strategies that improve learning outcomes and graduation rates for millions of Americans.

Specifically, we must embrace innovation, prompt implementation, regular evaluation, and continuous improvement…”

Newport News Public Schools is not only aware of this “sizable challenge” but has embraced the call to action as outlined in its 2010-2013, Agenda for Public Education. A Strategic Plan for College, Career and Citizen-Ready Graduates.

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The power of the plan lies in its clear vision, which is college, career and citizen-ready graduates!

**College Ready – Students as Learners**

The job market of the 21st century will require employees to successfully complete some post-secondary education. This is why we are committed to giving all Newport News students access to coursework and experiences that will guarantee their readiness for all post-secondary options.

**Career Ready – Students as Employees**

Many of the jobs for our graduates have yet to be created. To prepare for a future that is unpredictable requires a focus on skills and experiences to be a successful employee no matter what career pathway they choose. All Newport News students will graduate with an electronic portfolio, internship or job shadowing experience and connections with employers in our community.

**Citizen Ready – Students as Citizens**

Thriving communities need citizens who can and will contribute their time and talents by lending their service. Newport News Public Schools provides the supports and opportunities necessary to foster these citizenship skills. Our emphasis on youth development and leadership builds and encourages school and community involvement. Students are expected to join a school club, organization or athletic program to give them a vital connection to school and to practice skills necessary for productive citizenship.

To realize the vision of college, career and citizen-ready graduates in NNPS, the Academic Agenda for 2010-2013 includes three benchmarks for student achievement and development:

- **Achievement:** Student success as measured by satisfactory test scores meeting state and national standards.
- **Advancement:** Student success as measured by exemplary academic performance which exceeds state and national standards.
- **Youth Development:** Student success as measured by appropriate behavior and engagement in academics and activities.
Our Goals, Objectives & Strategies

Both the NNPS and DOE Educational Technology Plans are aligned with the NNPS Agenda for Public Education. The NNPS Tech Plan has incorporated DOE’s five stated goals. These goals and the Agenda for Public Education provided the foundation for our work as we developed our technology plan.

**Goal 1:**
Provide a safe, flexible, and effective learning environment for all students. This goal supports all three division benchmarks. See page 9 for measures.

**Objective 1.1**
Students will successfully participate in online and blended courses by the time of graduation.

**Strategy 1.1.1**
Provide student access to online courses for credit.

**Strategy 1.1.2**
Provide the infrastructure, software portal resources, and educator training necessary to support online learning for students.

**Objective 1.2**
Students will be engaged by experts, professionals and other students through virtual field trips and global classroom connections PreK-12.

**Strategy 1.2.1**
Provide the infrastructure, hardware, software, instructional materials, and the educator training necessary for video-conferencing in all schools.

**Objective 1.3**
Students who receive home bound instruction will participate in learning experiences through the use of technology.

**Strategy 1.3.1**
Provide mechanisms and tools for homebound students to participate in learning experiences through a variety of means, including video conferencing, online course websites, and other communication and participatory tools.

**Objective 1.4**
Educators and students will become proficient in safe and productive Internet use.

**Strategy 1.4.1**
Provide Internet safety learning opportunities and curricular resources, including the safe and responsible use of social media.

**Goal 2:**
Engage students in meaningful curricular content through the purposeful and effective use of technology. Ensuring that technology is integrated within the curriculum is one of our key objectives (2.1) and supports the Academic Agenda. See page 11 for measures.

**Objective 2.1**
The curriculum will reflect effective integration of technology.

**Strategy 2.1.1**
Provide training and coaching support to curriculum writing and revision teams to improve technology integration.

**Goal 3:**
Afford students with opportunities to apply technology effectively to gain knowledge, develop skills, and create and distribute artifacts that reflect their understanding. Again, this goal is well aligned with all three benchmarks. As an example, students will communicate and collaborate with their peers within NNPS and around the world (strategy 3.2). See page 13 for measures.

**Objective 3.1**
Educators will have access to pedagogical and coaching support for integrating technology into teaching and learning.

**Strategy 3.1.1**
Provide instructional technology coaches (TCIS).
Objective 3.2  Students will communicate and collaborate with their peers within NNPS and around the world.
Strategy 3.2.1  Provide learning experiences that promote cross-class collaboration and communication PreK-12 using blogs, wikis, and video-conferencing, and other online tools.

Objective 3.3  Students and employees will become proficient in information literacies.
Strategy 3.3.1  Provide opportunities for educators and students to analyze and evaluate media messages.

Objective 3.4  Students will represent their academic, work, and community service experiences electronically.
Strategy 3.4.1  Provide the infrastructure, hardware, software, and training for students to support the creation of electronic portfolios.

Objective 3.5  Students will be provided with a variety of assistive technologies to ensure diverse learning needs are met.
Strategy 3.5.1  Examine software and hardware up for adoption to gauge and catalog its assistive technology (AT) features based on best practice AT guidelines.

**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. NNPS is committed to maintaining a robust infrastructure that provides reliable access to necessary tools. By maintaining this infrastructure, NNPS can remain focused on its three benchmarks. **See page 16 for measures.**

Objective 4.1  Students will apply a variety of electronic tools in their academic work to demonstrate skills and understanding of content.
Strategy 4.1.1  Provide student-use computers in various form factors (desktop, laptop, handheld) at every school site.
Strategy 4.1.2  Provide interactive white-boards, projectors, and sound systems in classrooms.
Strategy 4.1.3  Provide a variety of Web 2.0 tools, modeling, simulation, and digital video software resources to classrooms.

Objective 4.2  Educators will have access to technical support for all software and hardware in use in the classroom.
Strategy 4.2.1  Operate a live, on-demand Help Desk to troubleshoot and fix technical problems with electronic tools.
Strategy 4.2.2  Maintain technical support staff for students and staff based on demand.

Objective 4.3  Students and educators will have access to a robust networking system to support academic exploration.
Strategy 4.3.1  Upgrade wireless networks to 802.11n standard for enhanced coverage and data throughput.
Strategy 4.3.2  Maintain supported applications and platforms per manufactures’ recommendations.
Strategy 4.3.3  Establish procedures for the use of non-NNPS electronic devices to access the division network.

**Goal 5:**
Use technology to support a culture of data-driven decision-making that relies upon data to assess and improve teaching and learning. NNPS has enterprise level software and hardware systems that can support a data driven organization. Program level reviews will identify what works and therefore what should be scaled up district wide as well as what does not work and therefore what should be eliminated. Since the infrastructure is in place, we can focus on effectively using this data to have a positive impact on teaching and learning, continuous professional development (strategy 5.1.2), as well as financial resiliency. **See page 19 for measures.**

Objective 5.1  Educators will analyze data to improve instruction and adapt to student needs.
Strategy 5.1.1  Provide data collection and analysis software, on-demand and scheduled data reports, and professional development for educators and administrators.
Strategy 5.1.2  Provide professional development on electronic tools for administrators and instructional coaches to support meaningful conversations about effective assessment practices.

Objective 5.2  Educators will effectively utilize formative assessments to improve instruction and respond to student needs.
Strategy 5.2.1  Provide efficient and easy-to-use electronic tools to educators to support formative assessment of students.
**Goal 1: Environment**

Provide a safe, flexible, and effective learning environment for all students

**Objective 1.1** Students will successfully participate in online and blended courses by the time of graduation.

**Strategy 1.1.1** Provide student access to online courses for credit

<table>
<thead>
<tr>
<th>Measure(s)</th>
<th>Results 2009-2010</th>
<th>Results 2010-2011</th>
<th>Results 2011-2012</th>
<th>Results 2012-2013</th>
<th>Results 2013-2014</th>
<th>Results 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student enrollment reports in online courses</td>
<td>326</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfactory performance in online courses</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Online course options integrated into course proposal and selection process</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common scheduling options available for video-conference-based courses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Strategy 1.1.2** Provide the infrastructure, software portal resources, and educator training necessary to support online learning for students.

<table>
<thead>
<tr>
<th>Measure(s)</th>
<th>Results 2009-2010</th>
<th>Results 2010-2011</th>
<th>Results 2011-2012</th>
<th>Results 2012-2013</th>
<th>Results 2013-2014</th>
<th>Results 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online facilitator and course-developer training records</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Electronic Learning Management System (eLMS) student and educator access reports</td>
<td>4047 users</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>eLMS usage training for middle and high school teachers (group)</td>
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<td>7</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>User licenses for eLMS</td>
<td>3080</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Web-based file and e-mail accounts for students</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
Objective 1.2 Students will be engaged by experts, professionals and other students through virtual field trips and global classroom connections PreK-12

Strategy 1.2.1 Provide the infrastructure, hardware, software, instructional materials, and the educator training necessary for video-conferencing in all schools

<table>
<thead>
<tr>
<th>Measure(s)</th>
<th>Results 2009-2010</th>
<th>Results 2010-2011</th>
<th>Results 2011-2012</th>
<th>Results 2012-2013</th>
<th>Results 2013-2014</th>
<th>Results 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online catalog of video-conference opportunities</td>
<td>Complete</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
</tr>
<tr>
<td>Video-conferencing server usage reports</td>
<td>500 hours of usage</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Budgeted video-conference documents</td>
<td>$5,000</td>
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</tr>
</tbody>
</table>

Objective 1.3 Students who receive home bound instruction will participate in learning experiences through the use of technology

Strategy 1.3.1 Provide mechanisms and tools for homebound students to participate in learning experiences through a variety of means, including video conferencing, online course websites, and other communication and participatory tools

<table>
<thead>
<tr>
<th>Measure(s)</th>
<th>Results 2009-2010</th>
<th>Results 2010-2011</th>
<th>Results 2011-2012</th>
<th>Results 2012-2013</th>
<th>Results 2013-2014</th>
<th>Results 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>eLMS access log</td>
<td>N/A</td>
<td>N/A</td>
<td>Beginning</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Objective 1.4 Educators and students will become proficient in safe and productive Internet use

Strategy 1.4.1 Provide Internet safety learning opportunities and curricular resources, including the safe and responsible use of social media.

<table>
<thead>
<tr>
<th>Measure(s)</th>
<th>Results 2009-2010</th>
<th>Results 2010-2011</th>
<th>Results 2011-2012</th>
<th>Results 2012-2013</th>
<th>Results 2013-2014</th>
<th>Results 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet safety training log</td>
<td>686 staff members</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
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<td>Sustain</td>
</tr>
<tr>
<td>Internet Safety HQ</td>
<td>Complete</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
</tr>
<tr>
<td>TCIS Technology Integration Observation Tool</td>
<td>Complete</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
</tr>
</tbody>
</table>
**Goal 2: Engagement**

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

**Objective 2.1** The curriculum will reflect effective integration of technology

**Strategy 2.1.1** Provide training and coaching support to curriculum writing and revision teams to improve technology integration.

<table>
<thead>
<tr>
<th>Measure(s)</th>
<th>Results 2009-2010</th>
<th>Results 2010-2011</th>
<th>Results 2011-2012</th>
<th>Results 2012-2013</th>
<th>Results 2013-2014</th>
<th>Results 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCIS integrated with curriculum writing and revision teams</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Objective 2.2** Educators will develop skills in interactive, engaging, adaptive instruction

**Strategy 2.2.1** Provide job-embedded professional development to create and implement content-specific technology-infused learning activities.

<table>
<thead>
<tr>
<th>Measure(s)</th>
<th>Results 2009-2010</th>
<th>Results 2010-2011</th>
<th>Results 2011-2012</th>
<th>Results 2012-2013</th>
<th>Results 2013-2014</th>
<th>Results 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCIS Staff Development log</td>
<td>27,000 Participant-hours Complete</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
</tr>
<tr>
<td>TCIS Technology Integration Observation Tool</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Strategy 2.2.2** Provide a variety of online learning resources for educators to improve their instruction.

<table>
<thead>
<tr>
<th>Measure(s)</th>
<th>Results 2009-2010</th>
<th>Results 2010-2011</th>
<th>Results 2011-2012</th>
<th>Results 2012-2013</th>
<th>Results 2013-2014</th>
<th>Results 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional Technology tip sheet, video, and resource banks</td>
<td>Complete</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
</tr>
</tbody>
</table>

**Strategy 2.2.3** Provide electronic observation tools to coaches and administrators to support conversations about effective teaching and learning practices.

<table>
<thead>
<tr>
<th>Measure(s)</th>
<th>Results 2009-2010</th>
<th>Results 2010-2011</th>
<th>Results 2011-2012</th>
<th>Results 2012-2013</th>
<th>Results 2013-2014</th>
<th>Results 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrator and coach feedback log</td>
<td>N/A</td>
<td></td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
</tr>
<tr>
<td>TCIS Technology Integration Observation Tool</td>
<td>Complete</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
</tr>
</tbody>
</table>
Goal 3: Application

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

**Objective 3.1** Educators will have access to pedagogical and coaching support for integrating technology into teaching and learning.

**Strategy 3.1.1** Provide instructional technology coaches (TCIS).

<table>
<thead>
<tr>
<th>Measure(s)</th>
<th>Results 2009-2010</th>
<th>Results 2010-2011</th>
<th>Results 2011-2012</th>
<th>Results 2012-2013</th>
<th>Results 2013-2014</th>
<th>Results 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budgeted position documents</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Objective 3.2** Students will communicate and collaborate with their peers within NNPS and around the world.

**Strategy 3.2.1** Provide learning experiences that promote cross-class collaboration and communication PreK-12 using blogs, wikis, and video-conferencing, and other online tools.

<table>
<thead>
<tr>
<th>Measure(s)</th>
<th>Results 2009-2010</th>
<th>Results 2010-2011</th>
<th>Results 2011-2012</th>
<th>Results 2012-2013</th>
<th>Results 2013-2014</th>
<th>Results 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCIS Technology Integration Observation Tool</td>
<td>Complete</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
</tr>
<tr>
<td>Video-conferencing usage log</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Objective 3.3 Students and employees will become proficient in information literacies.

Strategy 3.3.1 Provide opportunities for educators and students to analyze and evaluate media messages.

<table>
<thead>
<tr>
<th>Measure(s)</th>
<th>Results 2009-2010</th>
<th>Results 2010-2011</th>
<th>Results 2011-2012</th>
<th>Results 2012-2013</th>
<th>Results 2013-2014</th>
<th>Results 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library/Media Curriculum units</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Objective 3.4 Students will represent their academic, work, and community service experiences electronically.

Strategy 3.4.1 Provide the infrastructure, hardware, software, and training for students to support the creation of electronic portfolios.

<table>
<thead>
<tr>
<th>Measure(s)</th>
<th>Results 2009-2010</th>
<th>Results 2010-2011</th>
<th>Results 2011-2012</th>
<th>Results 2012-2013</th>
<th>Results 2013-2014</th>
<th>Results 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic portfolio handbook for schools</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Networked storage levels</td>
<td>Complete</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
</tr>
<tr>
<td>Collection and presentation software</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Objective 3.5** Students will be provided with a variety of assistive technologies to ensure diverse learning needs are met.

**Strategy 3.5.1** Examine software and hardware up for adoption to gauge and catalog its assistive technology (AT) features based on best practice AT guidelines

<table>
<thead>
<tr>
<th>Measure(s)</th>
<th>Results 2009-2010</th>
<th>Results 2010-2011</th>
<th>Results 2011-2012</th>
<th>Results 2012-2013</th>
<th>Results 2013-2014</th>
<th>Results 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistive Technology guidelines documents</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology published procedures</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Goal 4: Tools

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 Students will apply a variety of electronic tools in their academic work to demonstrate skills and understanding of content.

Strategy 4.1.1 Provide student-use computers in various form factors (desktop, laptop, handheld) at every school site.

<table>
<thead>
<tr>
<th>Measure(s)</th>
<th>Results 2009-2010</th>
<th>Results 2010-2011</th>
<th>Results 2011-2012</th>
<th>Results 2012-2013</th>
<th>Results 2013-2014</th>
<th>Results 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work order inventory and asset management system</td>
<td>Complete</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
</tr>
<tr>
<td>Computer refresh cycle</td>
<td>Complete</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
</tr>
</tbody>
</table>

Strategy 4.1.2 Provide interactive white-boards, projectors, and sound systems in classrooms.

<table>
<thead>
<tr>
<th>Measure(s)</th>
<th>Results 2009-2010</th>
<th>Results 2010-2011</th>
<th>Results 2011-2012</th>
<th>Results 2012-2013</th>
<th>Results 2013-2014</th>
<th>Results 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase orders</td>
<td>54%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Strategy 4.1.3 Provide a variety of Web 2.0 tools, modeling, simulation, and digital video software resources to classrooms.

<table>
<thead>
<tr>
<th>Measure(s)</th>
<th>Results 2009-2010</th>
<th>Results 2010-2011</th>
<th>Results 2011-2012</th>
<th>Results 2012-2013</th>
<th>Results 2013-2014</th>
<th>Results 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Order Inventory and Asset Management System</td>
<td>Complete</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
</tr>
</tbody>
</table>
Objective 4.2 Educators will have access to technical support for all software and hardware in use in the classroom.

Strategy 4.2.1 Operate a live, on-demand Help Desk to troubleshoot and fix technical problems with electronic tools.

<table>
<thead>
<tr>
<th>Measure(s)</th>
<th>Results 2009-2010</th>
<th>Results 2010-2011</th>
<th>Results 2011-2012</th>
<th>Results 2012-2013</th>
<th>Results 2013-2014</th>
<th>Results 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help Desk work order management system</td>
<td>15,667 work orders resolved</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student information system request and fulfillment log</td>
<td>7,799 calls</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>eLMS request and fulfillment log</td>
<td>2,450 work orders</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Strategy 4.2.2 Maintain technical support staff for students and staff based on demand.

<table>
<thead>
<tr>
<th>Measure(s)</th>
<th>Results 2009-2010</th>
<th>Results 2010-2011</th>
<th>Results 2011-2012</th>
<th>Results 2012-2013</th>
<th>Results 2013-2014</th>
<th>Results 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help Desk work order management system</td>
<td>11.5 hours per-work order avg. resolution time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Budgeted position documents</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Objective 4.3** Students and educators will have access to a robust networking system to support academic exploration.

**Strategy 4.3.1** Upgrade wireless networks to 802.11n standard for enhanced coverage and data throughput.

<table>
<thead>
<tr>
<th>Measure(s)</th>
<th>Results 2009-2010</th>
<th>Results 2010-2011</th>
<th>Results 2011-2012</th>
<th>Results 2012-2013</th>
<th>Results 2013-2014</th>
<th>Results 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>802.11n Core System</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>802.11n availability at schools and worksites</td>
<td>N/A</td>
<td></td>
<td>N/A</td>
<td></td>
<td>Beginning</td>
<td></td>
</tr>
<tr>
<td>Wireless network throughput reports</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Strategy 4.3.2** Maintain supported applications and platforms per manufactures’ recommendations.

<table>
<thead>
<tr>
<th>Measure(s)</th>
<th>Results 2009-2010</th>
<th>Results 2010-2011</th>
<th>Results 2011-2012</th>
<th>Results 2012-2013</th>
<th>Results 2013-2014</th>
<th>Results 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology refresh road map</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating system and productivity software</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Strategy 4.3.3** Establish procedures for the use of non-NNPS electronic devices to access the division network.

<table>
<thead>
<tr>
<th>Measure(s)</th>
<th>Results 2009-2010</th>
<th>Results 2010-2011</th>
<th>Results 2011-2012</th>
<th>Results 2012-2013</th>
<th>Results 2013-2014</th>
<th>Results 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology published procedures</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guest wireless network</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wireless network for student owned devices</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Goal 5: Results

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

Objective 5.1 Educators will analyze data electronically to improve instruction and adapt to student needs.

Strategy 5.1.1 Provide data collection and analysis software, on-demand and scheduled data reports, and professional development for educators and administrators.

<table>
<thead>
<tr>
<th>Measure(s)</th>
<th>Results 2009-2010</th>
<th>Results 2010-2011</th>
<th>Results 2011-2012</th>
<th>Results 2012-2013</th>
<th>Results 2013-2014</th>
<th>Results 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student information system deployment</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student information system professional development log</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student information system dashboard reports on demand</td>
<td>Complete</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
</tr>
<tr>
<td>Scheduled reports website</td>
<td>Complete</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
<td>Sustain</td>
</tr>
</tbody>
</table>
**Strategy 5.1.2** Provide professional development on electronic tools for administrators and instructional coaches to support meaningful conversations about effective assessment practices.

<table>
<thead>
<tr>
<th>Measure(s)</th>
<th>Results 2009-2010</th>
<th>Results 2010-2011</th>
<th>Results 2011-2012</th>
<th>Results 2012-2013</th>
<th>Results 2013-2014</th>
<th>Results 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrator and coach feedback system usage reports</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accountability professional development log</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TCIS Staff Development Log</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Objective 5.2** Educators will effectively utilize formative assessments to improve instruction and respond to student needs.

**Strategy 5.2.1** Provide efficient and easy-to-use electronic tools to educators to support formative assessment of students.

<table>
<thead>
<tr>
<th>Measure(s)</th>
<th>Results 2009-2010</th>
<th>Results 2010-2011</th>
<th>Results 2011-2012</th>
<th>Results 2012-2013</th>
<th>Results 2013-2014</th>
<th>Results 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division assessment procedures</td>
<td>N/A</td>
<td>N/A</td>
<td>Beginning</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Appendix I

### Budget Implications for Measures and Timelines

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1.2</td>
<td>15 educators trained, +10 / year growth</td>
<td>WHRO</td>
<td>$0</td>
<td>$0</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>1.1.2</td>
<td>3000 Electronic Learning Management System licenses</td>
<td>Operating Budget</td>
<td>$24,000</td>
<td>$24,000</td>
<td>$24,000</td>
<td>$24,000</td>
<td>$24,000</td>
</tr>
<tr>
<td>1.1.2</td>
<td>Add 750 ELMS licenses 750 licenses @$18.00 per = $13,500</td>
<td>Operating budget</td>
<td>-0-</td>
<td>Evaluate and adjust</td>
<td>Evaluate and adjust</td>
<td>Evaluate and adjust</td>
<td>Evaluate and adjust</td>
</tr>
<tr>
<td>1.2.1</td>
<td>Contracted video-conferencing opportunities</td>
<td>Title IID Operating Budget</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,000</td>
</tr>
<tr>
<td>1.4.1</td>
<td>Educator Internet safety certification and curriculum</td>
<td>Title IID Operating Budget 2012-2015</td>
<td>$2,600</td>
<td>$2,600</td>
<td>$2,600</td>
<td>$2,600</td>
<td>$2,600</td>
</tr>
<tr>
<td>2.1.1</td>
<td>60 TCIS summer man-hours of curriculum revision work</td>
<td>Operating Budget 2012-2015</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
<tr>
<td>3.1.1</td>
<td>TCIS positions 1/1000 students</td>
<td>Operating Budget State Funded</td>
<td>$2.25 million</td>
<td>$2.25 million</td>
<td>$2.25 million</td>
<td>$2.25 million</td>
<td>$2.25 million</td>
</tr>
<tr>
<td>3.1.1</td>
<td>TCIS positions 1 / 75 educators</td>
<td>Operating Budget</td>
<td></td>
<td>$233,000 in addition to above figure</td>
<td>$233,000 in addition to above figure</td>
<td>$233,000 in addition to above figure</td>
<td></td>
</tr>
<tr>
<td>4.1.1</td>
<td>1 computer per 3 students (including appropriate refreshes)</td>
<td>VPSA / Operating Budget</td>
<td>$764,000</td>
<td>$0</td>
<td>$2.35 million</td>
<td>$2.0 million</td>
<td>$2.01 million</td>
</tr>
</tbody>
</table>

**ARRA:** American Reinvestment and Recovery Act  
**VPSA:** Virginia Public School Authority
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1.2</td>
<td>Interactive whiteboard, projector, and sound system in core classrooms equipment installation (including appropriate refreshes)</td>
<td>ARRA / Title 1 Operating Budget</td>
<td>$2.35 million</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1.2.a</td>
<td>Interactive white-board and projector replacement components</td>
<td>Operating Budget</td>
<td>$8,400</td>
<td>$20,000</td>
<td>$53,000</td>
<td>$161,000</td>
<td>$8,500</td>
</tr>
<tr>
<td>4.1.3</td>
<td>Website / software subscriptions</td>
<td>Operating Budget</td>
<td>$114,000</td>
<td>$114,000</td>
<td>$114,000</td>
<td>$114,000</td>
<td>$114,000</td>
</tr>
<tr>
<td>4.2.1</td>
<td>Work Order Management System (School Dude) for Tech Help Desk</td>
<td>Operating Budget</td>
<td>$28,000</td>
<td>$28,000</td>
<td>$28,000 +</td>
<td>$28,000 +</td>
<td>$28,000 +</td>
</tr>
<tr>
<td>4.2.2</td>
<td>TSS positions 1/1000 students</td>
<td>Operating Budget</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>4.3.1</td>
<td>N-standard wireless upgrade</td>
<td>VPSA</td>
<td>$132,000</td>
<td>$108,000</td>
<td>$108,000</td>
<td>$108,000</td>
<td>$15,000</td>
</tr>
<tr>
<td>4.3.2</td>
<td>Application and platform road map*</td>
<td>VPSA / Operating Budget</td>
<td>$245,410</td>
<td>$281,210</td>
<td>$337,591</td>
<td>$433,666</td>
<td></td>
</tr>
<tr>
<td>4.3.2</td>
<td>Windows 7 &amp; Office 2010</td>
<td>VPSA / Operating Budget</td>
<td>$638,000</td>
<td>$293,000</td>
<td>$278,000</td>
<td></td>
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<tr>
<td>5.1.2</td>
<td>Administrator and coach feedback system and training</td>
<td>ARRA Operating Budget 2012-2013</td>
<td>$72,600</td>
<td>$72,600</td>
<td>$4,500 per school + up to $27,000 training</td>
<td>$4,500 per school + up to $27,000 training</td>
<td>$4,500 per school + up to $27,000 training</td>
</tr>
</tbody>
</table>

Appendix II A

Newport News Public Schools Technology Acceptable Use Procedure

Procedure Title: Technology Acceptable Use Procedure
Created: 01/08/2008  Revised: 06/03/2010

PURPOSE:
These procedures define the responsibilities of Newport News Public Schools Employees, Non-Employees, Volunteers, and Students using the computers, telecommunications, network and Internet resources provided by the school division. Every authorized user is required to read and acknowledge these procedures either by signing the appropriate use agreement form or the online acknowledgement form. Student forms will be filed in their school offices. All other user forms will be on file in the Human Resources office.

SCOPE:
All Newport News Public School (NNPS) Employees, Non-Employees, Volunteers and Student Use.

STATEMENT OF PROCEDURE:
Use of the NNPS Computer System by persons other than students should consist of activities necessary to support the purpose, goals and mission of NNPS. The following, although not inclusive, define specific acceptable and unacceptable uses of the NNPS Computer System.

1. Privacy:
Communications over the division’s network shall be considered public information and handled as such. Authorized users shall have no expectation of privacy in their use of the NNPS Computer System. All information created, sent, received, accessed, or stored in the NNPS Computer System is subject to inspection and monitoring at any time as authorized by the Superintendent or designee and may occur without notice to users. Technology Services may periodically review the NNPS Computer System to determine compliance with policy IJND for acceptable use. If unacceptable content or use is found, access privileges may be removed and the offender counseled at an appropriate level as outlined in section 12, Violations and Penalties, of this procedure.

2. Security:
Access to the NNPS Computer System is restricted to authorized users. Authorized users are responsible for their individual account information and should take all precautions to prevent others from accessing their account. Authorized users are prohibited from knowingly disclosing or modifying any assigned or entrusted access control to their account (such as: log-in identifiers, passwords, terminal identifiers, user identifiers, digital certificates, Internet Protocol (IP) addresses, etc.) for any purpose other than those required to perform authorized NNPS functions. Authorized users may only access, modify or destroy files, data and resources for which they are authorized and that lie within the scope of their responsibilities, and as defined by the Library of Virginia and the division’s Records Manager. Malicious destruction or modification of data or resources is prohibited.

All NNPS employees and students should immediately notify an administrator, principal or teacher if
they have identified a possible security breach.

Authorized users will not attempt to go beyond their authorized access to the NNPS Computer System. This includes attempting to log into the NNPS Computer System using another authorized user account or accessing or attempting to access another authorized user’s data without authorization. Unauthorized access is illegal, even if only for the purpose of browsing.

Authorized users will not deliberately attempt to disrupt the NNPS Computer System performance or destroy data by spreading computer viruses or by any other means.

At no time is a connection authorized to the NNPS Local Area Network via a non NNPS Computer System to include non NNPS mobile devices such as SMARTPhones, iTouch, iPad, PDA, and other mobile Wi-Fi accessible computing devices.

3. Facsimile (Fax):
Fax machines are to be used by authorized users. These machines are not to be used for sending or receiving personal correspondence. Any sender of personal correspondence is to be notified by the receiver to cease transmitting personal correspondence. Any review, dissemination or use of the fax transmission by a person other than the addressee is prohibited. Students are not authorized to use NNPS fax machines unless permission has been granted by an NNPS employee.

4. Telephone Service:
NNPS telephone service, to include landlines and cellular telephones, is to be used primarily for making calls regarding students and other school business. The use of school division phones for personal business should be kept to a minimum.

Occasionally it may be necessary for employees to place a long distance call using the school phone. If these calls are for school business callers must complete, at the time of the call, Exhibit E: Long Distance Call Log to record each long distance business call.

Personal long distance calls at school are discouraged; however, should they become necessary and with approval from the facility administrator, arrangements will be made to pay for the cost of the long distance call. Callers will complete, at the time of the call, Exhibit E: Long Distance Call Log to record each personal long distance call.

On the last working day of each month the facility administrator will submit the Exhibit E: Long Distance Call Logs to Technology Operations. The call logs will be reviewed and compared against the corresponding monthly long distance phone bill. The accounting department will be notified of all personal long distance phone calls to coordinate reimbursement to the division.

5. Copyright:
Division policies on copyright will govern the use of materials accessed through the NNPS Computer System. Because the extent of copyright protection of some information found on the Internet is unclear, users will make a standard practice of requesting permission from the holder of the work if their use of the material has the potential of being considered an infringement.

Teachers will instruct students to respect copyrights and to request permission when appropriate. Users must not knowingly load copyrighted data onto the NNPS Computer System or use commercial software in violation of its copyright and/or licensing agreement and will not perform downloads or
installs without prior written authorization from Technology Operations.

6. NNPS Computer System Software:
Only division approved and provided software shall be loaded on the NNPS Computer System. No software such as applications, games, freeware, demonstration software, and shareware shall be downloaded or installed on any device in the NNPS Computer System without written approval from the Technology Support Services Supervisor.

7. Academic Freedom, Selection of Material, Student Rights to Free Speech:
Federal and State Laws on academic freedom and free speech will govern the use of the Internet. When using the Internet for class activities, teachers will select material that is appropriate in light of the age of the students and that is relevant to course objectives. Teachers will preview materials and sites they require or recommend for student access to determine the appropriateness of the material contained on or accessed through the site.

8. NNPS Websites:
NNPS has established a Web site and Web pages that present information about the school division. The Superintendent will designate an administrator to be responsible for maintaining the division Web Site. The principals or their designee(s) are responsible for overseeing the development and content of their school’s web site and for ensuring that published content is relevant to the department/school and complies with the AUP Policy.

School Board policy GBAA, Discrimination and Harassment applies fully to the NNPS published Internet sites. Abusive, vulgar, harassing, threatening or otherwise inappropriate content will not be published on School Board owned Internet sites.

Authorized NNPS employees may post NNPS student work, images, videos, or sound recordings that feature NNPS students, and NNPS student names on NNPS websites without seeking additional permission from parents or guardians provided such postings serve legitimate academic purposes. Authorized NNPS employees may also make such postings to 3rd-party websites whose uses are endorsed by NNPS and whose uses are authorized for academic purposes by appropriate building or district-level administrators. NNPS employees may not make any such postings to 3rd-party websites whose use is of a personal nature. Authorized non-employees and volunteers may not make any such postings to NNPS or third-party websites. Authorized students may not make any such postings to NNPS or third-party websites unless directed to do so by an authorized NNPS employee.

No NNPS employee is authorized to post confidential student information to any website without express permission from the superintendent or the superintendent’s designee whether or not the website includes data access protections.

NNPS websites will not contain direct links to pages that violate the AUP policy.

9. Electronic Mail (e-mail):
The NNPS e-mail system provides authorized users the capability of sending and receiving electronic communications between all schools and the central office in addition to electronic communications outside the school division. Use of the e-mail system should pertain to school related business only. Authorized users will check their e-mail frequently and delete unwanted messages promptly. User e-mail, both sent and received, will be archived by the divisions e-mail archiving system in accordance with the policies and procedures defined by the Library of Virginia and the division’s Records Manager.
As normal policy, students are not granted access to e-mail however, for special needs or special projects and programs, students will be granted access to the e-mail system for the duration of the school year, program or project. It is the program or project administrator’s responsibility to ensure the e-mail system is not abused or used in a matter other than described in this AUP for such programs and projects. E-mails are written records and may be subject to inspection and monitoring as authorized by the Superintendent or designee and without notice to the user. Users must not have and shall have no expectation of privacy in e-mail. In addition, disclosure may occur pursuant to the Virginia Freedom of Information Act (FIOA), Code of Virginia, §2.2-3700 et seq., legal process and civil discovery, and division reviews and maintenance. The following are examples of inappropriate uses:

- Authorized users will not engage in spamming.
- Authorized users will not use the e-mail system for personal gain, commercial purposes, or political lobbying.
- It is prohibited to use e-mail for the propagation of viruses, computer worms, Trojan Horses, and other malicious software applications.
- Authorized users will not engage in phishing.
- Authorized users will not transmit threatening, abusive, vulgar, obscene, or harassing e-mails.
- It is prohibited to attempt to subscribe another authorized user to any electronic mailing lists.
- With the exception of the NNPS web based e-mail system it is prohibited to access any web based e-mail system from any NNPS Computer System.

10. Text Messaging:
Text messaging may be provided to those authorized users requiring cellular service as part of the job requirements for NNPS. Text messaging is not provided by default on a NNPS provided cellular device. Use of text-messaging should pertain to school related business only.

Authorized users must request that text messaging service be turned on for their approved cellular device and provide justification for its use in the performance of the users’ duties.

Authorized users will not transmit threatening, abusive, vulgar obscene or harassing text messages. Text messages are written records and may be subject to inspection and monitoring without notice to the user. Users must not have and shall have no expectation of privacy in text messaging. In addition, disclosure may occur pursuant to the Virginia Freedom of Information Act (FIOA), Code of Virginia, §2.2-3700 et seq., legal process and civil discovery, and division reviews and maintenance.

11. Internet Safety and Ethics
The NNPS Computer System will not be used to send, receive, view or download illegal/undesirable content/materials or to conduct illegal activities (e.g. arranging for the sale/purchase of drugs, engaging in criminal gang activity, pornography or threatening the safety of another individual). It is prohibited to use electronic communication services for fraudulent, threatening, obscene, rude, intimidating, defamatory, harassing, discriminatory, or otherwise unlawful messages. In addition, the NNPS Computer System will not be used for commercial purposes, personal gain, or political lobbying.

Restrictions against inappropriate language apply to public messages, private messages and material posted on Web pages. Authorized users will conduct themselves in a manner that is appropriate and proper as representatives of the school division.

Authorized users will subscribe only to discussion group mail lists that are school division sponsored/au-
Authorized, affiliated and/or relevant to school business. Authorized users will not access material that is profane or obscene (pornography), that advocates illegal acts, or that advocates violence or discrimination towards other people (hate literature). For students, a special exception may be made for hate literature only if the purpose of such access is to conduct research and access is approved both by the teacher and the parents or legal guardian.

The Children’s Internet Protection Act (CIPA) requires schools and libraries receiving E-Rate discounts for Internet access and internal connections to comply with the CIPA. NNPS has implemented an Internet Filter to block access to text and visual depictions deemed “obscene,” “child pornography,” or “harmful to minors.”

Internet filters are not fail-proof and therefore may not block all undesirable web pages. Therefore, authorized users will only be allowed access to the Internet to pursue education-related activities. Teachers must keep up-to-date on Internet safety issues and provide accurate, timely information to students. Teachers will establish and post rules for safe Internet use near computers in classrooms, libraries and labs and remind students regularly that the rules are intended to ensure safety. Teachers should immediately notify an administrator, principal or Technology Operations if they have identified a possible CIPA issue.

Authorized users will not post personal contact information about themselves or other people on public web sites. Personal contact information includes school or work addresses, telephone numbers, etc. Students will not agree to meet with someone they have met online without the approval of their parents or legal guardians.

12. Violations and Penalties
Authorized users will be given notice of violations and given an opportunity to provide explanation for determination regarding continuing access to the NNPS Computer System. Privileges may be suspended immediately. For employees, disciplinary action may be taken. Violations of the law will be reported to law enforcement officials. NNPS will cooperate fully with local, state, and federal officials in any investigation related to illegal activities conducted using the NNPS Computer System. Disciplinary action related to student access to electronic resources may be determined at the building and/or classroom level in accordance with existing policies and procedures as stated in School Board Policy JI, Student Rights and Responsibilities, and/or other School Board Policies and Procedures governing student discipline. Disciplinary actions should be tailored to assist the student in gaining the self-discipline to behave appropriately on an electronic network.

13. Definitions:
- Non-employees: Contractors and support personnel who directly support the goals and mission of NNPS.
- NNPS Computer System: A computer system or mobile wi-fi device that is owned, purchased, and/or supported by NNPS, and includes all technology resources and access to telecommunications networks (e.g. internet, local and wide area networks, hardware, software and communications services) division-wide and remotely.
- Authorized User: A NNPS Computer System user whose access privileges have not been suspended or revoked.
- NNPS Local Area Network: The computer network using the private Internet Protocol (IP) address scheme (not directly accessible from the Internet) defined by NNPS Technology Operations and accessed by wired or wireless connections.
Infringement: When an individual inappropriately reproduces a work that is protected by a copyright.

Spamming: An e-mail user sending annoying, non school business, or unnecessary message(s) to an individual or a large number of people on a specific e-mail list or site.

Phishing: The act of sending an e-mail to a user falsely claiming to be an established legitimate enterprise in an attempt to fraudulently deceive or persuade the user to surrender private information that will be used for identity theft.

Web based e-mail: A web based system that performs the functions of a mail client allowing access to e-mail through the Internet.

Text messaging: Text messaging is the common term for the sending of “short” (160 characters or fewer, including spaces) text messages from mobile phones using the Short Message Service (SMS).

The Online acknowledgement form is an electronic form for NNPS employees to electronically acknowledge the AUP. The url is: https://secure.nn.k12.va.us/aup/

14. Disclaimer
The School Board will not be responsible for any information that may be lost, damaged or unavailable when using the NNPS Computer System or for any information retrieved from the Internet. The School Board is not responsible for any unauthorized charge or fee resulting from the use of the NNPS Computer System. In the event filtering software, used to screen Internet sites for offensive material, is unsuccessful and authorized users gain access to inappropriate and/or harmful material, the School Board will not be liable. Every effort will be made to avoid the violation of privacy of individuals or groups; however, NNPS Computer System authorized users have no right of privacy and should have no expectation of privacy in materials sent, received, or stored in School Board owned equipment within the NNPS Computer System.

OTHER POLICIES:
- School Board Policy IJND: Acceptable Use Policy
- School Board Policy GBAA: Discrimination and Harassment

AUTHORITY REFERENCE:
- Code of Virginia, §22.1-70.2 (Acceptable Internet use policies for public and private schools)
- Children’s Internet Protection Act (Federal Communications Commission (Consumer & Governmental Affairs Bureau))
- The Library of Virginia
- Virginia Department of Education

OTHER REFERENCE:
- Technology Services Memorandum: Division Owned Cell Phones
- FAQ-HELP IJND Acceptable Use Procedure
- School Board Exhibit IJND-E: Employee, Non-Employee, and Volunteer Acceptance Form
- School Board Exhibit IJND-E: Student Acceptance Form
- School Board Exhibit IJND-E: Long Distant Call Log
- School Board Exhibit IJND-E: Fact Sheet
Electronic Communications-Students
This school system provides computer systems with access to Internet and electronic mail (e-mail) to students to promote educational excellence in schools by facilitating resource sharing, innovations and communications. The use of these systems shall be consistent with School Board policy IJND Technology Resources and the educational objectives of the division.

All NNPS computing systems and peripherals are the property of the division and are intended for the purpose of conducting official school business only. Students shall use this tool in a professional manner consistent with federal copyright laws and with state laws and district policies governing student behavior. Internet and e-mail shall not be utilized to share confidential information about students or employees. All illegal and improper use of the computing systems, including but not limited to obscenity, harassment, solicitation, chain letters, special interest group proselytizing, harassing or threatening statements, gambling, sexual innuendo, pornography, and violating copyright or intellectual property rights are prohibited.

Communications over the division’s network shall be considered public information and handled as such; there is no expectation to privacy while communicating, in any format, on the divisions’ network. NNPS Technology Services may periodically review directories or messages to determine compliance with policy IJND for acceptable use. If unacceptable content or use is found, access privileges may be removed and the offender counseled at an appropriate level.

Teachers are to supervise student’s internet and e-mail access and usage and, if non-acceptable use is found, provide immediate, appropriate logical consequences to the student, including revoking the privilege if warranted, and possibly other disciplinary action. One designated person at each school will manage student internet and e-mail account access rights with oversight by Technology Services. Account rights and passwords are not to be shared outside of the intended “owner(s)”. Students will keep passwords secure and will change passwords when directed by Technology Services.

Any statement of personal belief expressed on the Internet or in an e-mail is implicitly understood to be the author’s individual point of view, and not that of NNPS, its administrators, teachers, staff, or any of its schools.

The school Principal will ensure that all pertinent students have notice of this policy and are provided a “Student-Parent-School Partnership Form” to read, sign and have their parent/guardian sign. This form will be maintained in the student’s scholastic record.

Training
• All students shall complete the required internet safety, security and ethics training before use of the Internet. Access will not be provided until this training is completed.
• Security
• Students shall not allow other students to use their account name or password to access the divisions network
• Students shall not use a teachers account name or password to access the divisions network.
• Accessing any local network files, documents, applications, etc., without express permission by an
authorized staff member is forbidden.

- Copyright and Citations
- Any copyrighted materials are subject to the Fair Use provision of copyrighted materials as it relates to education. Information concerning Fair Use can be found in each school library.
- Internet materials used in reports or other documents must be cited. If there is no direct citation, the Uniform Resource Location (URL) must be cited.

- Undesirable Materials
- Newport News Public Schools will take all possible precautions to restrict access to undesirable materials. However, students and teachers must also accept responsibility for restricting access to these materials.
- Students who gain access to undesirable Internet materials must report this material to their teacher.
- Teachers who gain knowledge of undesirable Internet materials must report this material to the Administrator in the building and Technology Services.

- Software
- Only division approved and provided software shall be loaded on the divisions computing systems. No software such as applications, games, freeware, demonstration software, and shareware shall be downloaded from the Internet without written approval from Technology Services.

- Listservs and Blogs
- Students may not subscribe to Listservs and Blogs without approval from their Teacher

- Commercial Use
- Commercial use of the Internet by Newport News Public Schools students is prohibited.

Violations may result in a loss of access as well as other disciplinary or legal action.

Reference School Board Policy and Procedures IJND for the complete Technology Acceptable Use Policy.

The Parent/Legal Guardian may withdraw permission by providing written notice to the school.
Newport News Public Schools has engaged in a comprehensive effort to promote safe and ethical use of Internet-related technologies for several years. This effort consists of training and educating both students and employees, providing age-appropriate curricular resources at all school levels, requiring signed agreements of both students and employees to abide by acceptable use procedures, maintaining CIPA-compliant Internet filtering tools and procedures, and assessing students’ knowledge of safe and ethical use.

**Highlights include:**

- Curricular resource usage in schools – iSAFE, NetSmartz, Common Sense Media (CyberSmart!), Professor Garfield, iKeepSafe (Faux Paws)
- Employee training – iSAFE certification, new-teacher induction, social networking best practices, PTA Internet Safety nights
- Parent outreach – PTA and school-sponsored Internet Safety nights
- Internet filtering – 8e6 web filters, technical and instructional review of website content, website blocking/unblocking request and review procedures
- Revisions conducted during the past three years based on student and staff assessments include:
  - The addition of responsible and safe use of social networking technologies to employee acceptable use procedures
  - Professional development for employees around use of social networking technologies
  - Curricular revisions for ethical use of media and information by students
  - Greater age-stratification of curricular resources for educating students
  - Cooperation between technical and instructional departments to determine appropriate levels of website access for employees and students
Defining assistive technology is not an easy task. Federal and State laws provide broad definitions of assistive technology and services. Newport News Public Schools (NNPS) has developed guidelines for assistive technology service delivery based on both the Federal and State laws and has used “Best Practice” information from a variety of resources to translate these laws into an assistive technology service plan. These guidelines are offered as a “work in progress” as NNPS recognizes the changing needs of students as well as the constant change of technology.

Terms

NNPS = Newport News Public Schools

ATRC = Assistive Technology Resource Center

AT = Assistive Technology

ET = Educational Technology

ATSP = Assistive Technology Service Provider – NNPS staff trained in assistive technology who provides services to students and staff.

IATP = Integrated Assistive Technology Service Plan – Plan developed with ATSP, teacher, student and other school personnel and the parent. The plan describes how assistive technology is to be used by the student.

SETT = Student Environment Tasks and Tools Framework was developed at the University of Kentucky by Joy Zabala and her AT Team. The SETT is used to assist IEP/504 teams in determining if and/or how assistive technology maybe used to assist a student in accomplishing tasks in a variety of settings.
LEGAL MANDATES FOR ASSISTIVE TECHNOLOGY

**Definition of Assistive Technology**
Assistive technology is any piece of equipment or product system, whether acquired commercially, off the shelf, modified, or customized, that is used to **increase, maintain, or improve functional** capabilities of individuals with disabilities, (IDEA, 2004) (VA Regulations Governing Special Education Programs for Children with Disabilities in Virginia (2002))

**Translation:** Any tool or device that a student with a disability uses to do a task that he/she could not do without it. (E.g. A student who uses an Augmentative Communication device to speak.) Or Any tool or device which assists a student to complete tasks easily, faster or with more accuracy. (E.g. A student who uses a portable word processor for written assignments due to difficulties with the mechanics of writing.)

Assistive technology tools/devices range from Low Tech to High Tech. A low-tech tool would be a pencil grip, picture schedules, triangle board communicators, etc. A high tech tool would be a computer, portable word processor or software.

**Definition of Assistive Technology Services –**
Assistive technology service means any service that directly assists the student with a disability in the selection, acquisition or use of an assistive technology device. To include:

- The evaluation of the needs of a child with a disability, including a functional evaluation of the child in the child’s customary environment;
- Purchasing, leasing or otherwise providing for the acquisition of assistive technology devices by children with disabilities;
- Selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing assistive technology devices;
- Coordinating and using other therapies, interventions, or services with assistive technology devices, such as those associated with existing education and rehabilitation plans and programs;
- Training or technical assistance for a child with a disability or, if appropriate that child’s family and
- Training or technical assistance for professionals (including individuals providing education or rehabilitation services), employers, or other individuals who provide services to employ or are otherwise substantially involved in the major life functions of that child.
- Devices and services must be provided at “no cost” to the family.
- (IDEA, 2004) (VA Regulations Governing Special Education Programs for Children with Disabilities in Virginia (2002)).
- Devices and services must be documented in the child’s I.E.P.

**Translation:** The Assistive Technology Resource Center of NNPS (ATRC) offers consultations in the students classrooms with a continuum of devices/tools. ATRC staff provides consultation to teachers, educational assistants, therapists etc, and parents. In addition, the ATRC offers classes to all NNPS employees and parents at the center for additional training and support of assistive technology.
Accessible Instructional Materials
IDEA (2004) created a National Instructional Materials Accessibility Center (NIMAC) which requires states to adopt the National Instructional Accessibility Standard (NIMAS) to ensure that accessible instructional materials (eg. Braille, large print and digital text) are provided in a timely manner. Virginia has developed the AIM-VA center at George Mason University. Students must be found eligible by guidelines established by the State of Virginia – www.aimva.org.

Eligibility
All students with an I.E.P. or 504 plan are eligible for assistive technology, services and accessible instructional materials.

Considering the “NEED” for Assistive Technology and Accessible Instructional Materials-
IDEA 2004 mandates that IEP/504 teams must “consider” the need for assistive technology and accessible instructional materials. The need must then be documented this in the IEP or 504 Plan. At each IEP/504 meeting the team must consider whether a student needs assistive technology/ accessible instructional materials to achieve FAPE, by accomplishing goals and objectives, curriculum access and/or to succeed in general education. The use of assistive technology is based on the IEP or 504 plan’s goals and objects, i.e. tools and devices used to accomplish tasks.

Keep in mind:
• What is it the child needs to be able to do within his/her educational program, that he/she is unable to do because of his/her disability?
• What daily educational tasks or activities is the child not able to do or participate in because of his/her disability?
• What has been tried to meet the student’s need?
• Have the attempted strategies worked?
ASSISTIVE TECHNOLOGY SERVICES PROCESS FOR NNPS
(NNPS Strategic Plan Objective 3.5.1)

I. Consideration
During the IEP/504 meeting assistive technology is considered as the goals and objectives are being developed for each student.

Based on the following:
• IEP/504 team has at least one person who has the knowledge of assistive technology and can guide the team in the decision making process.
• IEP/504 team considers a continuum of assistive technology accommodations and services from least restrictive to more restrictive.
• Decisions are based on IEP/504 goals and objectives.
• Determination of the need for assistive technology is based on data about the student, the environment, tasks and tools.
• Compliance with federal and state mandates.

Rationale: In compliance with federal and state mandates, assistive technology is considered for all students in NNPS with an IEP or 504 plan. Consideration is a review of information obtained from data, evaluations, input from teachers, parents, other school personnel and IEP/504 goals and objectives. This information is pertinent in determining the “need for” or levels of support/accommodations/assistive technology required by the student to accomplish tasks/goals/curriculum access. For example, at an IEP/504 meeting it was determined that a student with handwriting difficulties could benefit from assistive technology accommodations of a pencil grip or slant board. Another student with handwriting difficulties may require a portable word processor or access to a computer.

Once the “need” for assistive technology has been determined the following conclusions can be made:
Current assistive technology accommodations/modifications are working = FAPE.

1. Assistive technology is already being used (or there has been a trial with assistive technology). Assistive technology becomes part of the IEP/504 under the accommodation/supplemental aids and services section to continue use. List the duration, frequency and location of the assistive technology.

2. Available standard/educational technology has been determined to be appropriate supports for the student. The standard/educational technology needs to be documented in the IEP/504. (i.e. computer with word processing software, portable word processor, graphic organizer, calculator, picture schedules and picture communication boards, etc.)

3. Educational Technologies or Standard Classroom Tools are those supports that are available at each school. If this technology has been determined to be assistive for the student, these tools can be placed on the IEP/504 plan. No AT referral is needed.

4. Based on assistive technology and accommodations/modifications that have been previously tried, the IEP team may conclude that new assistive technology should be tried. It is then describe in the IEP/504, with generic terms, including the features of the assistive technology. The new AT is described using generic terms and placed in the Present Level of Performance.

5. The IEP/504 team refers the student because it has been determined that AT would enhance the students
ability to achieve IEP objectives and access to the curriculum.

**Exceptions to Consideration:**

1. Students entering NNPS from another district with assistive technology listed on the IEP/504. AT Consideration should be conducted. If the assistive technology is still appropriate, list on the IEP/504. Refer to the ATRC if the assistive technology is not available school based.
2. Students with average or above potential and exhibit a significant motor disability.
3. Student has a degenerative diagnosis or a condition which impacts access to the curriculum or in attaining IEP/504 goals.

**II. Referrals**

NNPS offers two types of referrals classroom and individual student referrals.

**Classroom Referrals** – A teacher may refer her classroom to the ATRC for assistive technology supports. This is called engineering a classroom. Engineering a classroom provides students with similar needs access to assistive technology curriculum supports.

- The Assistive Technology Service Provider (ATSP) will assist the teacher in deciding what types of supports are needed for the students within her classroom as well as provide ongoing training for school personnel and parents.
- Assistive technology used by a student will be placed on each the student’s IEP/504 documenting duration, frequency and location. (I.e. Students may not need all supports placed in the classroom.)
- Determination of placement of assistive technology supports in other environments (i.e. other classroom, home) will be considered on an individual basis. An IEP/504 meeting will be called to consider assistive technology placement needs.
- If a student in an engineered classroom is not achieving then an individual student referral maybe necessary to further assess student needs and supports. An IEP/504 meeting should be convened to do assistive technology consideration to begin the process.

**Student Referrals** - An individual student referral is used when a student has unique educational needs and is not succeeding with current accommodations, educational technologies and/or within an engineered classroom. (E.g. Environmental access and augmentative communication issues.)

- Generated from an IEP/504 meeting, once an IEP/504 has been developed and assistive technology has been considered.
- Student referrals do not go on an SE-3 form. To generate a referral, fill out the AT Consideration Form and submit along with the IEP/504 plan and any other pertinent documentation (e.g. writing samples), to Donna Waldman, Assistive Technology Coordinator who then assigns an ATSP.
- The initial consultation will take place within 60 days of the ATRC receiving the referral.
- Referrals are not part of the Eligibility process for several reasons:
  1. Special Education Services for IEP/504 make a student eligible for assistive technology.
  2. An assistive technology consult does not yield information that would assist in determining eligibility for special education services.
  3. It is not just another assessment it is based on the need for FAPE.
  4. FAPE has not been determined yet.
  5. Assistive Technology are tools and services used to support students to increase, maintain, or improve abilities which have been identified as a result of the eligibility process.
III. Consultation for Assistive Technology Assessment are based on:

- Based on the SETT Framework developed by Joy Zabala, 1995.

<table>
<thead>
<tr>
<th>S = The Student</th>
<th>E = The Environment</th>
<th>T = The Tasks</th>
<th>T = The Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>What does the student need to do?</td>
<td>Arrangement</td>
<td>What tasks does the student need to accomplish?</td>
<td>Tools are both services and devices.</td>
</tr>
<tr>
<td>What are the student’s special needs?</td>
<td>Support</td>
<td>What is everybody else doing?</td>
<td>What tools/strategies does the student currently use to complete tasks? Working/not working - Why?</td>
</tr>
<tr>
<td>What are the student’s current abilities?</td>
<td>Materials and Equipment</td>
<td>What are the critical elements of the activities?</td>
<td>Ideas for new or additional tools and strategies.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Across Environments</td>
</tr>
</tbody>
</table>

- Protocols provided by the State of Virginia to assess student skills and need for assistive technologies.
- NNPS provides consultations or assistive technology extended assessments in the students classroom. This refers to the trial of one or more assistive technology devices to assure a good match to student needs. The result is more services and time spent in the classroom assisting the teacher and student in integrating the assistive technology tools. During device trials the ATSP provides on going consultation, the amount of time is decided on an individual basis. Trails are usually 6 – 8 weeks. An Integrated Assistive Technology Plan (IATP) is developed for the trial.
- On line resources such as www.techmatrix.org provides comparison information on features of software and devices for both assistive technologies and educational technologies. (NNPS Strategic Plan Objective 3.5.2)
- Once assistive technology devices/services are determined, an IEP/504 meeting is planned to discuss the results of the trial. A new IATP may be developed based on the information from the device trial and the IATP can be added to the IEP/504 as an addendum.
- NNPS will purchase or provide assistive technology tools required by the student to receive FAPE.
- Assistive technology services will be determined on an individual basis.
- Use of assistive technology in other settings (home, community) will be determined on an individual basis according to the needs of the student.

IV. Services

- The Assistive Technology Resource Center (ATRC) offers various services/training in a variety of settings.
- Services are provided on a consultative basis in the student’s classroom. The Assistive Technology Service Provider (ATSP) will train the student and the teacher on the use and integration of assistive technology tools. The teacher and other school staff are responsible for implementation and monitoring on a daily basis. ATSP services will be decided on an individual basis.
- ATRC is opened to all NNPS staff by appointment.
- Parent training is offered on a flexible basis, by appointment at the student’s school, ATRC or home.
when applicable.

• ATRC offers mini-workshops, professional development institutes and trainings at schools or the ATRC office.

• T-TAC (Training and Technical Assistance Centers) are valued resources for additional training for staff.

• Assistive Technology devices for the Hearing-Impaired are not handled by the ATRC; please call the Supervisor for the Hearing Impaired Program. The exception is curriculum-based software, which is handled by the ATRC.

• Assistive Technology devices and software for visually disabled students are handled jointly through the ATRC and the Coordinator for the Vision Program.

• Students placed out of district receive assistive technology consultation. NNPS will provide devices and services for those devices as needed. Software is deemed a curriculum support and therefore provided by the placement. Staffs from out of district placements are invited to participate in ATRC trainings.

V. Documentation of Assistive Technology in the IEP/504

• Not all students using assistive technology will or should be monitored by an ATSP however use of assistive technology still needs to be documented in the IEP/504.

• The ATSP will assist teachers in defining assistive technology devices and services for the students they service.

• It is very important that assistive technology be defined in the IEP/504, as this would allow the student to use the technology as an accommodation on standardized testing such as the SOL’s.

Guidelines

1. Present Level of Performance – Should define how, for what and why a student uses assistive technology to complete tasks. Strength and weaknesses should be discussed. The device and software should be noted in specific terms. Eligibility for accessible instructional materials is also documented in the present level of performance.

2. Listing of Assistive Technologies – Assistive technology is provided as a part of the student’s special education program and should be defined in the Accommodation/Modification/Supplementary Aids and Services section of the IEP. The assistive technology must be defined in terms of location, duration, and frequency.

NNPS offers a continuum of educational and assistive technologies and support strategies to students. Assistive technologies are tools used, when needed, to accomplish tasks to support the curriculum and IEP. There are many accommodations and/or modifications, which should be considered to enhance participation in general education or to gain, access to age-appropriate curriculum. Least restrictive technologies may provide adequate support to the student to achieve FAPE. These technologies should be implemented before more restrictive accommodation/modifications and/or assistive technologies are considered.

Engineered Classrooms – NNPS is engineering classrooms with appropriate tools to support the students’ academic or functional progress. Standard classroom tools may be considered to be assistive when it is determined that the student cannot accomplish tasks, goals, curriculum access without them.

Educational Technology/Standard Classroom Tools- NNPS students have extensive access to school-based technology which may be considered assistive technology for a student with a disability. These tools include: graphic organizers, calculators, access to computers, access to portable word processors, etc. These tools, when deemed appropriate can be placed on an IEP/504 plan as an accommodation/modification.
Appendix V

Needs Assessment Summary Graphs

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

A. Students have adequate access to fully-online courses to support learning objectives.

B. Students have adequate access to blended (in-person and online combined) courses to support learning objectives.

C. Students have adequate access to online learning opportunities to support learning objectives when circumstances (e.g. homebound instruction, alternative instruction) require them.

D. Students have adequate access to ‘virtual field trips’ to support learning objectives.

E. The largest barrier to improvement in this area overall is:

- Available Time: 269
- Available Resources: 321
- Professional Development: 53
- Curriculum: 56
- Technical Support: 32
- Competing Concerns: 49
- Other: 59
Goal 2: Engage students in meaningful curricular content through the purposeful and effective use of technology.

A. The NNPS curriculum adequately provides units, lessons, and activities that feature effective technology use to support learning objectives.

B. The NNPS curriculum adequately provides assessments that feature effective technology use for students to demonstrate learning.

C. The largest barrier to improvement in this area overall is:

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available Time</td>
<td>35%</td>
</tr>
<tr>
<td>Available Resources</td>
<td>31%</td>
</tr>
<tr>
<td>Competing Concerns</td>
<td>5%</td>
</tr>
<tr>
<td>Professional Development</td>
<td>7%</td>
</tr>
<tr>
<td>Curriculum</td>
<td>12%</td>
</tr>
<tr>
<td>Technical Support</td>
<td>6%</td>
</tr>
<tr>
<td>Other</td>
<td>6%</td>
</tr>
</tbody>
</table>

A: Strongly Agree 144  
Agree 453  
Neutral 120  
Disagree 106  
Strongly Disagree 18  
N/A 11  
B: Strongly Agree 105  
Agree 350  
Neutral 165  
Disagree 175  
Strongly Disagree 36  
N/A 19  
C: Available Time 290  
Available Resources 261  
Professional Development 60  
Curriculum 95  
Technical Support 22  
Competing Concerns 52  
Other 52
Goal 3: Afford students with opportunities to apply technology effectively to gain knowledge, develop skills, and create and distribute artifacts that reflect their understandings.

<table>
<thead>
<tr>
<th>A. Students have adequate opportunities to express creativity and innovation using technology tools.</th>
<th>C. Students have adequate opportunities to engage in research and to analyze information using technology tools.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>119</td>
</tr>
<tr>
<td>Agree</td>
<td>436</td>
</tr>
<tr>
<td>Neutral</td>
<td>138</td>
</tr>
<tr>
<td>Disagree</td>
<td>139</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>17</td>
</tr>
<tr>
<td>N/A</td>
<td>13</td>
</tr>
<tr>
<td>B. Students have adequate opportunities to engage in peer and adult communication and collaboration using technology tools.</td>
<td>D. Students have adequate opportunities to engage in critical thinking, problem solving, and decision-making using technology tools.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>85</td>
</tr>
<tr>
<td>Agree</td>
<td>350</td>
</tr>
<tr>
<td>Neutral</td>
<td>209</td>
</tr>
<tr>
<td>Disagree</td>
<td>183</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>14</td>
</tr>
<tr>
<td>N/A</td>
<td>22</td>
</tr>
</tbody>
</table>
Goal 3: Afford students with opportunities to apply technology effectively to gain knowledge, develop skills, and create and distribute artifacts that reflect their understandings.

E. Students have adequate opportunities to explore issues in culture, ethics, and society using technology tools.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>21%</td>
<td>40%</td>
<td>23%</td>
<td>10%</td>
<td>2%</td>
<td>4%</td>
</tr>
</tbody>
</table>

G. Instructional staff are provided adequate professional development in the use of technology to improve instruction and student learning.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>18%</td>
<td>40%</td>
<td>18%</td>
<td>3%</td>
<td>19%</td>
<td>1%</td>
</tr>
</tbody>
</table>

F. Students have adequate opportunities to learn technology concepts and systems.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>19%</td>
<td>44%</td>
<td>19%</td>
<td>12%</td>
<td>4%</td>
<td>3%</td>
</tr>
</tbody>
</table>

H. Instructional leaders are provided adequate professional development in the use of technology to improve instruction and student learning.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>22%</td>
<td>42%</td>
<td>22%</td>
<td>12%</td>
<td>3%</td>
<td>4%</td>
</tr>
</tbody>
</table>

I. The largest barrier to improvement in this area overall is:

<table>
<thead>
<tr>
<th>Available Time</th>
<th>Available Resources</th>
<th>Professional Development</th>
<th>Curriculum</th>
<th>Technical Support</th>
<th>Competing Concerns</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>355</td>
<td>193</td>
<td>115</td>
<td>37</td>
<td>29</td>
<td>53</td>
<td>53</td>
</tr>
</tbody>
</table>

E. Strongly Agree 84  G. Strongly Agree 177  I. Available Time 355
Agree 343  Agree 368  Available Resources 193
Neutral 196  Neutral 173  Professional Development 115
Disagree 184  Disagree 174  Curriculum 37
Strongly Disagree 20  Strongly Disagree 27  Technical Support 29
N/A 35  N/A 7  Competing Concerns 53
Other 53

F. Strongly Agree 100  H. Strongly Agree 105
Agree 377  Agree 366
Neutral 168  Neutral 191
Disagree 168  Disagree 146
Strongly Disagree 25  Strongly Disagree 26
N/A 24  N/A 30
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.

A. Students have adequate access to computers to learn and to demonstrate learning.

- Strongly Agree: 142
- Agree: 387
- Neutral: 111
- Disagree: 171
- Strongly Disagree: 38
- N/A: 12

B. Students have adequate access to the Internet to learn and to demonstrate learning.

- Strongly Agree: 133
- Agree: 409
- Neutral: 120
- Disagree: 157
- Strongly Disagree: 26
- N/A: 18

C. Students have adequate access to general educational software to learn and to demonstrate learning.

- Strongly Agree: 94
- Agree: 378
- Neutral: 175
- Disagree: 158
- Strongly Disagree: 30
- N/A: 18

D. Students have adequate access to content-specialized hardware and software (e.g. digital science instruments, music-creation software) to learn and to demonstrate learning.

- Strongly Agree: 67
- Agree: 258
- Neutral: 211
- Disagree: 233
- Strongly Disagree: 39
- N/A: 55
Goal 5: Use technology to support a culture of data-driven decision making that relies upon data to assess and improve teaching and learning.

### A. I have adequate access to professional development to perform analysis of student data to improve instruction.

- Strongly Agree: 22%
- Agree: 50%
- Neutral: 17%
- Disagree: 14%
- Strongly Disagree: 2%
- N/A: 2%

### B. I have adequate access to tools (software and hardware) to perform analysis of student data to improve instruction.

- Strongly Agree: 24%
- Agree: 44%
- Neutral: 17%
- Disagree: 15%
- Strongly Disagree: 2%
- N/A: 2%

### C. I have adequate access to support (learning and technical) to perform analysis of student data to improve instruction.

- Strongly Agree: 15%
- Agree: 48%
- Neutral: 14%
- Disagree: 12%
- Strongly Disagree: 2%
- N/A: 4%

### D. I have adequate access to on-demand reports to perform analysis of student data to improve instruction.

- Strongly Agree: 22%
- Agree: 44%
- Neutral: 17%
- Disagree: 15%
- Strongly Disagree: 1%
- N/A: 4%

### E. The largest barrier to improvement in this area overall is:

- Available Time: 46%
- Available Resources: 20%
- Professional Development: 15%
- Curriculum: 12%
- Competing Concerns: 7%
- Other: 5%

<table>
<thead>
<tr>
<th>Category</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>N/A</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>129</td>
<td>428</td>
<td>147</td>
<td>125</td>
<td>16</td>
<td>17</td>
<td>122</td>
</tr>
<tr>
<td>B</td>
<td>120</td>
<td>429</td>
<td>147</td>
<td>130</td>
<td>17</td>
<td>17</td>
<td>383</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>122</td>
</tr>
<tr>
<td>D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>99</td>
</tr>
<tr>
<td>E</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>46</td>
</tr>
<tr>
<td>Available Time</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available Resources</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Development</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Curriculum</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Technical Support</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competing Concerns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Available Time: 355
- Available Resources: 159
- Professional Development: 118
- Curriculum: 21
- Technical Support: 34
- Competing Concerns: 55
- Other: 40
Appendix IV
Needs Assessment Summary Graphs

Difficulties to Address
Computer availability 13%
Time constraints 13%
Professional Development 10%
Non-computer equipment availability 9%
Curriculum 7%
Impractical usage (speed, connections, reliability) 7%
Teacher willingness 7%
Budget 5%
Computers for kids at home 5%
Data access levels 5%
TCIS Support 4%
Administrative emphases 4%
Planning time 4%
Student behavior 4%
Blocked websites 3%
Appendix VI
Summary of The Agenda For Public Education

In October 2010, The School Board of Newport News approved a new Agenda for Public Education that outlines a plan for success. This plan focuses on five strategic supports: quality curriculum, accountability systems, financial resiliency, community connections, and employee expertise. These supports are used to raise student benchmarks in achievement, advancement and youth development. The complete Agenda for Public Education can be viewed at www.nnschools.org/superintendent/agenda.pdf

Employee Expertise
- A comprehensive retention and recruitment process
- Job-specific professional development plans that support individual and organizational development
- A structured process to provide relevant, timely and constructive feedback to replace the current performance assessment tools for all job classifications

Understanding the Chart:
The chart below illustrates the Agenda for Public Education. The five strategic priorities that make up the outer part of the circle support the benchmarks in the inner part of the circle.

Quality Curriculum
- The integration of the college, career and citizen-ready skills
- Expectations and experiences that promote self-directed learning
- A thorough and balanced assessment system
- Instructional supports for both students and teachers

Accountability Systems
- A modernized student information system to manage student-related data
- Data literacy education to advance student learning
- SOL standards-based student reporting to identify skill mastery across subject areas
- Program review process to ensure program effectiveness and resource efficiency

Financial Resiliency
- Financial literacy for staff to identify, analyze and develop strategies to address issues
- The integration of long-range financial planning with the Academic Agenda
- The benchmarking of NNPS practices against industry norms and best practices
- Enhanced transparency and communication to promote community awareness of NNPS fiscal management

Community Connections
- Consistent, two-way communication with district families, employees, and the community
- Exemplary customer service practices between staff and community members
- A comprehensive community network to promote programs and learning
- Opportunities that involve families and the community in division and school initiatives

Achievement
- Student success as measured by satisfactory test scores meeting state and national standards

Advancement
- Student success as measured by exemplary academic performance which exceeds state and national standards

Youth Development
- Student success as measured by appropriate behavior and engagement in academics and activities

Benchmarks

Understanding the Chart: The chart below illustrates the Agenda for Public Education. The five strategic priorities that make up the outer part of the circle support the benchmarks in the inner part of the circle.
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