

# **Audubon Public Schools**



## **Three Year Technology Plan**

**July 1, 2013 through June 30, 2016**

**Audubon Public Schools  
Three-Year Educational Technology Plan**

## Stakeholder Table

<b>Stakeholder Table</b>		
<b>Title</b>	<b>Name</b>	<b>Signature</b>
Superintendent	Donald A. Borden	
Principal	Carleene Slowik	
Technology Coordinator	Michael Sloan	
Curriculum Committee Member	Kate Sullivan	
Teacher	Elizabeth Canzanese	
Library Media Specialist	Wilma Fitzpatrick	
Guidance	Bonnie Smeltzer	
Board Member	Ralph Gilmore	
Parent	Tony Carbone	
Student	Vincent Livecchi	
Community Member	Bernadette Dorsey	

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## Technology Inventory

<b>Three-Year Educational Technology Plan Inventory Table</b>			
<b>Area of Need</b>	<b>Describe for erate funded year 1 2013-2014</b>	<b>Describe for erate funded year 2 2014-2015</b>	<b>Describe for erate funded year 3 2015-2016</b>
Technology Equipment including assistive technologies	<p>The philosophy behind the purchase of technology is to identify the need, determine a solution to address the need, and then acquire the technology to support the solution. This philosophy supports the purchase of a variety of technologies to meet the differentiated needs of a diverse learning population.</p> <p>For the 2013-14 school year the district will continue to refresh outdated desktop and laptop hardware across all schools, as the budget allows, with hardware that meets minimum requirements of a dual-core processor, 4 GB of RAM, and a device resolution of 1024x768, with other hardware specifications being deemed as insignificant. These specifications exceed the requirements set for in the recommendations from PARCC and can be anticipated to be viable for several years into the</p>	<p>The philosophy behind the purchase of technology is to identify the need, determine a solution to address the need, and then acquire the technology to support the solution. This philosophy supports the purchase of a variety of technologies to meet the differentiated needs of a diverse learning population.</p> <p>For the 2014-15 school year the district will continue to refresh outdated desktop and laptop hardware across all schools as the budget allows. Minimum hardware specifications will be determined by industry standards and align with the recommendations from PARCC and anticipated to be viable for several years into the future.</p>	<p>The philosophy behind the purchase of technology is to identify the need, determine a solution to address the need, and then acquire the technology to support the solution. This philosophy supports the purchase of a variety of technologies to meet the differentiated needs of a diverse learning population.</p> <p>For the 2015-16 school year the district will continue to refresh outdated desktop and laptop hardware across all schools as the budget allows. Minimum hardware specifications will be determined by industry standards and align with the recommendations from PARCC and anticipated to be viable for several years into the future.</p>

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	future.		
Networking Capacity	The district has a full-duplex 50MB (50 up/50 down) broadband internet connection provided by Comcast Business. All schools in the district are connected through a wide-area network with a 100MB fiber backbone. Internally each school has 1000MB connections between switches and 100MB connections to the end user.	The district has a full-duplex 50MB (50 up/50 down) broadband internet connection provided by Comcast Business. All schools in the district are connected through a wide-area network with a 100MB fiber backbone. Internally each school has 1000MB connections between switches and 100MB connections to the end user. <b><i>Connections to end user will be upgraded to 1000MB incrementally.</i></b>	The district has a full-duplex 50MB (50 up/50 down) broadband internet connection provided by Comcast Business. All schools in the district are connected through a wide-area network with a 100MB fiber backbone. Internally each school has 1000MB connections between switches and 100MB connections to the end user. <b><i>Connections to end user will be upgraded to 1000MB incrementally.</i></b>
Filtering Method	The district uses the Secure School filtering appliance provide by K12USA for internet filtering. This appliance allows us to maintain CIPA compliance while providing students and staff with access to appropriate internet based resources.	The district uses the Secure School filtering appliance provide by K12USA for internet filtering. This appliance allows us to maintain CIPA compliance while providing students and staff with access to appropriate internet based resources.	The district uses the Secure School filtering appliance provide by K12USA for internet filtering. This appliance allows us to maintain CIPA compliance while providing students and staff with access to appropriate internet based resources.
Software used for curricular support and filtering	District Wide <ul style="list-style-type: none"> <li>• Microsoft Office 2007</li> <li>• Google Apps Education Edition</li> <li>• Genesis - Student Information System</li> <li>• OnCourse - Lesson Planning</li> </ul> <p>Each school in the district makes use of a number of software solutions including local programs,</p>	District Wide <ul style="list-style-type: none"> <li>• Microsoft Office 2007</li> <li>• Google Apps Education Edition</li> <li>• Genesis - Student Information System</li> <li>• OnCourse - Lesson Planning</li> </ul> <p>Each school in the district makes use of a number of software solutions including local programs,</p>	District Wide <ul style="list-style-type: none"> <li>• Microsoft Office 2007</li> <li>• Google Apps Education Edition</li> <li>• Genesis - Student Information System</li> <li>• OnCourse - Lesson Planning</li> </ul> <p>Each school in the district makes use of a number of software solutions including local programs,</p>

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	cloud solutions, and apps to support instruction. The implementation of this software is determined based on identified student learning needs	cloud solutions, and apps to support instruction. The implementation of this software is determined based on identified student learning needs	cloud solutions, and apps to support instruction. The implementation of this software is determined based on identified student learning needs
Technical Support and maintenance	Technology maintenance and support is provided by in-house district technology personnel and supported by vendor warranties where applicable. The technology department takes an active role in both the repair and maintenance of hardware throughout the district including end user hardware, network equipment, and servers. Additionally the technology department is continually designing and implementing new technology systems (hardware and information systems) to improve the technology infrastructure. End user support is also provided by the technology department in answering technical question as they arise and assisting in the creation and analysis of data driven solutions.	Technology maintenance and support is provided by in-house district technology personnel and supported by vendor warranties where applicable. The technology department takes an active role in both the repair and maintenance of hardware throughout the district including end user hardware, network equipment, and servers. Additionally the technology department is continually designing and implementing new technology systems (hardware and information systems) to improve the technology infrastructure. End user support is also provided by the technology department in answering technical question as they arise and assisting in the creation and analysis of data driven solutions.	Technology maintenance and support is provided by in-house district technology personnel and supported by vendor warranties where applicable. The technology department takes an active role in both the repair and maintenance of hardware throughout the district including end user hardware, network equipment, and servers. Additionally the technology department is continually designing and implementing new technology systems (hardware and information systems) to improve the technology infrastructure. End user support is also provided by the technology department in answering technical question as they arise and assisting in the creation and analysis of data driven solutions.
Telecommunications equipment and services	Telecommunication service solutions provided by RFP Solutions, which has a phone in every classroom and the ability to make calls and announcements from anywhere in all three schools.	Telecommunication service solutions provided by RFP Solutions, which has a phone in every classroom and the ability to make calls and announcements from anywhere in all three schools.	Telecommunication service solutions provided by RFP Solutions, which has a phone in every classroom and the ability to make calls and announcements from anywhere in all three schools.

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## **Needs Assessment**

The Audubon School District Technology Department promotes a three tiered philosophy:

- Identify the need
- Determine the appropriate solution
- Acquire the appropriate technology to support the solution

This philosophy allows for a multitude of needs to be identified and addressed. As needs arise, we strive to offer a wide array of solutions. We identify hardware, telecommunication and software solutions that can address multiple needs and are in the best interest of the district stakeholders.

Needs are identified through a variety of methods designed to be inclusive of all district stakeholders, including:

- Regular technology meetings
- Individual meetings with the technology team and building administrator
- Individual meetings with the technology team and department supervisors
- Survey of staff and students technology needs
- Examination of current industry trends in technology
- Pilot testing on new technologies

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## **Three-Year Goals**

**Goal 1 - Increase network infrastructure to support 1000MB to end-user to support the use of a variety of network and internet based resources.**

- Upgrade district WAN fiber backbone to support 1000MB between sites.
- Upgrade all switches in the district to support 1000MB on all ports to the end user including desktop connections and connections to all wireless access points.

**Goal 2 - Implement supportive technologies to improve information systems; decrease the burden of manual data collection and analysis, and increase the use of data to support data driven decision making.**

- Identify ineffective data collection methods (ex. paper logs).
- Implement solutions to aid in the collection and analysis of data.
- Where possible make use of systems currently in place to support information systems.

**Goal 3 - Upgrade desktop/laptop computers district-wide to meet minimum hardware specifications as determined by industry standards.**

- Replace hardware that does not meet minimum specifications as determined by the technology team in collaboration with district stakeholders.
- Minimum specifications for the 2013-14 school year include a dual-core processor, 4 GB of RAM, and a device resolution of 1024x768.
- Ensure minimum specifications align with district learning needs and specifications set forth by PARCC.

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## Three-Year Implementation and Strategies

<b>Three-Year Technology Implementation Activity Table</b>				
<b>District Goal and Objective</b>	<b>Strategy/Activity</b>	<b>Timeline</b>	<b>Person Responsible</b>	<b>Documentation</b>
Goal 1	Develop strategy for the incremental upgrade of networking equipment.	Feb. '14	Sloan	
Goal 1	Upgrade fiber connection between sites to 1000MB.	Jul. '14	Sloan	
Goal 1	Install and configure networking equipment to provide 1000MB to end user.	Ongoing	Sloan	
Goal 2	Identify district practices that involve data collections that can be improved.	Ongoing	Technology Committee	
Goal 2	Develop strategies to improve data collection and analysis, using systems currently in place where applicable.	Ongoing	Technology Committee	
Goal 3	<b>(13-14)</b> Upgrade end user desktops/laptops that do not meet minimum specs as allowed by budget.	Aug. '13	Sloan	
Goal 3	Develop requirements for minimum desktop/laptop hardware specifications for purchases.	Ongoing (Apr)	Technology Committee	
Goal 3	Upgrade end user desktops/laptops that do not meet minimum specs as allowed by budget.	Ongoing (Aug)	Sloan	



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## Professional Development Strategies

<b>Educators' Proficiency/ Identified Need</b>	<b>Ongoing, sustained, high-quality professional development planned</b>	<b>Support</b>
<p>Raising Student Achievement on State Tests</p>	<p>Use of digital resources: Evaluation, Audit and Implementation, in order to raise student achievement and deliver common core standards to effectively prepare students for the PARCC Platform. Data analysis of digital resources to track impact on student achievement.</p> <p>Developing strategies for instruction that involve making sure students have the computer and Internet research skills they will need to be successful on the PARCC.</p> <p>Continuing to utilize AIMSWeb as a tool for identification of students who are performing below level in ELA; Investigate the efficacy of using AIMSWeb or a similar tool to identify math weaknesses.</p>	<p>Grade level and department level time for collaboration, including viewing demonstrations of new programs, making audits of ones already in use and evaluating needs in an ongoing manner. District level collaborations to provide opportunities for K-12 articulation on use of digital resources.</p> <p>Time for staff who attended out of district workshops or who have done independent research, to turn key to their peers.</p> <p>Time for RTI staff to collaborate on AIMSWeb testing results including: data analysis, student grouping and instructional planning.</p> <p>Time to continue the rollout of RTI and AIMSWeb to 6<sup>th</sup> grade (2013-2014), 7<sup>th</sup> grade (2014-2015) and 8<sup>th</sup> grade (2015-2016), including training for teacher(s) in administration, data collection, analysis, grouping and subsequent instruction.</p>
<p>Using Technology to Inform Instruction</p>	<p>Strategies for using technology to inform, enhance and broaden the learning experience; use of webinars, videos showing best practices, peer observation, demonstration lessons and collaborative time.</p>	<p>Lesson plan analysis and commentary from administrators; observations that include use of technology, follow up by tailored PD to increase effectiveness; time for peer observations and demonstration lessons; grade level and department level time for collaboration, including lesson plan analysis, investigation of ways to measure effectiveness of using technology in the classroom, sharing of best practices and problem solving to make technological strategies more effective. District level collaborations to provide opportunities for K-12 articulation. Time for staff who attended out of district workshops or who have done independent research, to turn key to their peers.</p>

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Creating Blended and/or Flipped Classrooms	Strategies for creating and maintaining a blended classroom	<p>Time for visitations to other districts where blended learning is a success; grade level, content level and K-12 articulation about strategies and ways to measure effectiveness, as well as ongoing technological needs as a result of providing a blended and/or flipped classroom; peer observations, viewing of best practices via videos; analyzing effectiveness and identifying ongoing technological and PD needs.</p> <p>Time for staff who attended out of district workshops or who have done independent research, to turn key to their peers.</p>
Effective student use of the Internet.	Internet research skills, understanding of search engines and how they deliver results; strategies to instruct students so they can search in a responsible and through manner and so that they can validate the information they find.	<p>Time for research, targeted workshops and collaborations on navigating the information highway and web literacy; collaborative time during department and grade level meetings, as well as after school PD.</p> <p>Time for staff who attended out of district workshops or who have done independent research, to turn key to their peers.</p>
Creating, implementing and using SGOs to inform instruction and measure student achievement in the classroom.	Use of data analysis tools to record, maintain and analyze student score on SGO assessments.	<p>K-12 sessions on the use of data platforms to effectively collect and analyze data from SGOs; grade level and content area collaborations on effective methods of data collection.</p> <p>Time for staff who attended out of district workshops or who have done independent research, to turn key to their peers.</p>
Increasing district writing and math scores on state tests, SATs and college placement tests	Use and evaluation of online math and ELA programs.	Time to research, pilot and evaluate district online math and ELA programs in collaborative committees; grade level and department level meetings.
Teacher Evaluation	Use of Online tools to conduct observations and communicate/record evaluations; as well as to provide feedback for necessary or suggested PD.	Time to train staff on the use of teacher evaluation programs and to share updates, as needed.

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## Evaluation Plan

<b>Educational Technology Plan Evaluation Narrative</b>	
<b>Describe the process to regularly evaluate how...</b>	
<i>a. Telecommunication services, hardware, software and other services are improving education.</i>	The district measures how technologies have impacted education through a variety of metrics. As technologies are infused across the curriculum these metrics include but are not limited to surveys, test scores, and teacher/student performance. Specifically the district employs a variety of software based tools to both evaluate and provide support for student progress including Diebles, Aimsweb, Digits, IXL, and MyAccess to name a few. These tools are able to provide real-time and historical data to help the district evaluate the success of the services we have implemented and inform data driven decisions to guide the district in future decisions.
<i>b. Effective integration of technology is enabling students to meet challenging state academic standards.</i>	The district makes every effort to infuse technology across all aspects of the education process. We employ a multi-tiered approach to the evaluation of the success of this integration as it pertains to student learning and meeting the academic standards set forth by the state and common core standards. These processes include but are not limited to evaluative observations, student and teacher growth metrics, test scores, and surveys. The evaluative processes are an ongoing effort that allows the district to get a clear picture of how integration strategies are performing and how they can be adjusted to perform better in the future.
<i>c. The LEA is meeting the identified goals in the educational technology plan.</i>	The district has monthly meetings of the technology committee. Through the life of the technology plan the committee will regularly examine the goals set forth in the technology plan. The examination of these goals will include a reporting on the progress of the activities defined to meet each goal. A needs assessment to see if the requirements of the goal have changed or if additional requirements need to be implemented. Lastly we will evaluate the goal to see how it has worked to improve education.

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## **Funding Plan Table**

The district maintains an annual technology budget for upgrading outdated hardware, consumable supplies, services, maintenance, and additions/upgrade to our district infrastructure. The allocation of this budget is determined on a need basis in an effort to keep the budget flexible and in a position to meet the diverse needs presented by a 21<sup>st</sup> century learning environment. In addition to the annual budget the district seeks supplemental funding through grants, donations, and various local organizations and businesses. The district maintains strong relationships with the Audubon Education Association and the Audubon Fathers Association both of whom provide financial support through fundraising and other various methods.