

**Andover Public Schools  
Digital Learning Strategic Plan  
2013 - 2016**

**Digital Learning Vision**

APS students will be immersed in learning environments in which technology is a seamless and fully integrated component of everyday classroom lessons and projects to prepare them for living in and working in a society dominated by digital communication.

Andover Public Schools  
Strategic Plan Focus Area 2: Technology Supported Learning

**Digital Learning:** APS students will be immersed in interactive technology rich classrooms that support instruction and student learning to prepare them for a society dominated by digital communication.

**Outcomes**

- The incorporation of the 4 C's (Collaboration, Communication, Critical Thinking and Creativity) to promote the development of 21<sup>st</sup> century skills that will ensure students graduate Future Ready.
- A digitized model for curriculum instruction and assessment that provides the basis for a technology enrich classroom.

**The Process**

The Technology Task Force was established utilizing the skills and experiences of individuals from with the school district; (teachers, administrators, program advisors, digital learning specialist) community representatives and parents.

The process for developing and evaluating the strategic plan was achieved through a series of meetings where participants evaluated the technology survey, goals, strategies, and measures in small group interaction. Student Goals are:

- College Ready – Students as Leaders
  - The job market of the 21st century will require employees to successfully complete some post-secondary education.
- 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 successful employee no matter what career pathway they choose. All Andover students will graduate with an electronic portfolio.

**Strategy 2: Create technology-rich digital classrooms where students and teachers use appropriate and safe technology tools and resources that support the learning and teaching process.**

Objective	Action Steps	Progress Benchmarks	Time Frame	Action Team
<p>2.0 Teachers will successful participate in a robust PD Environment that includes online and blended courses.</p>	<ul style="list-style-type: none"> <li>○ Strategy 2.0.1 Determining student learning action plan (teaching and learning) Considering:                             <ul style="list-style-type: none"> <li>● Impact of Technology on Teacher Role</li> <li>● Patterns of Teacher Use (teacher’s proficiency with technology)</li> <li>● Design of Instructional Setting</li> <li>● Curriculum Areas</li> <li>● Patterns of Student Use</li> </ul> </li> <li>○ Strategy 2.0.2 Complete curriculum and documented benchmarks and assessments that are aligned to Massachusetts State Framework and ISTE NETs for teachers and students.</li> </ul>	<ul style="list-style-type: none"> <li>● Accessibility to technology that supports teaching and learning</li> <li>● Implementation of digital learning professional development plan</li> </ul>	<p>2013 - 2015</p>	<p>Director of Digital Learning, Digital Learning Department, Tech Task Committee, Advisory Committee, Assistant Superintendent</p>
<p>2.1 Students will successfully participate in online and blended courses by the time of graduation.</p>	<ul style="list-style-type: none"> <li>○ Strategy 2.1.1 Provide student access to online courses for credit.</li> <li>○ Strategy 2.1.2 Provide the infrastructure, software portal resources, and educator training necessary to support online learning for students</li> <li>○ Strategy 2.1.3 Additional course offerings at the high school</li> </ul>	<ul style="list-style-type: none"> <li>● Implementation of EDx curriculum at the high school, which provides students access to online courses for credit.</li> <li>● Expanded course offers provided to students.</li> <li>● Implementation of Innovation Lab &amp; Student Help Desk at HS level.</li> </ul>		
<p>2.2 Educators and students will become proficient in safe and productive Internet use.</p>	<ul style="list-style-type: none"> <li>○ Strategy 2.2.1 Provide Internet safety learning opportunities and curricular resources, including the safe and responsible use of social media, staying within the CIPA/COPPA Compliance.</li> </ul>	<ul style="list-style-type: none"> <li>● Implementation of documented benchmarks and assessments that are aligned to Massachusetts State Framework and ISTE NETs for teachers and students.</li> <li>● Accessibility to technology that supports teaching and learning</li> </ul>		

**Strategy 3: Engage students in meaningful curricular content through the purposeful and effective use of technology. Ensuring that technology is integrated within the curriculum through the 4Cs.**

Objective	Action Steps	Progress Benchmarks	Time Frame	Action Team
<p>3.1 Educators will develop skills in interactive, engaging, adaptive instruction, which incorporates the 4Cs. The curriculum will reflect effective integration of technology.</p>	<ul style="list-style-type: none"> <li>○ Strategy 3.1.1 Provide training and coaching support to curriculum writing and revision teams to improve technology integration.</li> <li>○ Strategy 3.1.2 Provide job-embedded professional development to create and implement content-specific technology-infused learning activities.</li> <li>○ Strategy 3.1.3 Provide a variety of online learning resources for educators to improve their instruction.</li> <li>○ Strategy 3.1.4 Train staff on digital learning based activities for differentiation and personalized learning</li> </ul>	<ul style="list-style-type: none"> <li>● Implementation of digital learning professional development plan which includes:                             <ul style="list-style-type: none"> <li>○ APS TechCon Technology Conference</li> <li>○ Expand Tech Byte Technology Series</li> <li>○ Tech Byte Newsletter</li> <li>○ Summer Academy</li> <li>○ EdCamp</li> <li>○ Mentor/mentee program</li> </ul> </li> <li>● Implementation of learning management system (LMS) to disseminate and curate resources for staff.</li> </ul>	<p>2013 – 2015</p>	<p>Director of Digital Learning, Superintendent, Asst. Superintendent, Digital Learning Specialists, School Administration</p>
<p>3.2 Develop a consistent digital learning curriculum with identified benchmarks for every grade level.</p>	<ul style="list-style-type: none"> <li>○ Strategy 3.2.1 Develop elementary, middle, and high school curriculum, identify benchmarks, and align assessments for each level.</li> <li>○ Strategy 3.2.2 Identify those areas of the curriculum where technology can be integrated into the teaching and learning.</li> </ul>	<ul style="list-style-type: none"> <li>● Integration of digital learning into the curriculum at the elementary level.</li> <li>● Implementation a web presence for all staff/departments and classes</li> <li>● Utilize cloud based applications</li> <li>● Implementation the use of a Learning Management System (LMS) for both students and teachers.</li> </ul>	<p>2014 - 2015</p>	<p>Director of Digital Learning, Superintendent, Asst. Superintendent, Digital Learning Specialists, School Administration</p>
	<ul style="list-style-type: none"> <li>○ Strategy 3.2.3 Research online textbooks</li> </ul>	<ul style="list-style-type: none"> <li>● Implementation online textbooks and curriculum resources</li> </ul>	<p>2013-2014</p>	<p>Director of Digital Learning, Superintendent, Asst. Superintendent, Digital Learning Specialists, School Administration, Department Head</p>

Strategy 4: Afford students with opportunities to apply technology effectively to gain knowledge, develop skills, and create and distribute artifacts that reflect their understanding.				
<p>4.1 Educators will have access to pedagogical and coaching support for integrating technology into teaching and learning.</p>	<ul style="list-style-type: none"> <li>○ Strategy 4.1.1 Ensure appropriate staffing and funding across the district, establishing Digital Learning Specialist at all levels.</li> </ul>	<ul style="list-style-type: none"> <li>● Equity across the district in all schools at all levels.</li> <li>● Hire additional faculty to implement plan.</li> </ul>	<p>2014 – 2015</p>	<p>School committee, Director of Digital Learning, School Administration, Assistant Superintendent</p>
<p>4.2 Students will communicate and collaborate with their peers within Andover and around the world.</p>	<ul style="list-style-type: none"> <li>● Strategy 4.2.1 Provide learning experiences that promote cross-class, cross district collaboration and communication through online digital Web 2.0 Tools</li> <li>● Procure and implement a learning management system for students and teachers that incorporates:               <ul style="list-style-type: none"> <li>○ Asynchronous and synchronous learning environment</li> <li>○ Data management component</li> <li>○ Support Google App or cloud based learning</li> <li>○ Data migration between SIS system</li> <li>○ Embedding external multimedia</li> <li>○ Streaming content</li> <li>○ Record sessions</li> <li>○ Hybrid Courses</li> <li>○ Assessment Tools</li> <li>○ Integrated message system (chat, reminders, email component)</li> <li>○ Group and discussion forums</li> <li>○ Assessable user created/copyright free content</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>○ Pilot LMS for teachers</li> </ul>	<p>2013 – 2014</p>	<p>School committee, Director of Digital Learning, School Administration, Assistant Superintendent</p>
		<ul style="list-style-type: none"> <li>○ Implementation of teacher LMS</li> <li>○ Pilot LMS with Student</li> </ul>	<p>2014 - 2015</p>	
		<ul style="list-style-type: none"> <li>○ Implementation of Student LMS</li> </ul>	<p>2015-2016</p>	

4.3 Students and teachers will become proficient in digital and information literacies.	<ul style="list-style-type: none"> <li>○ Strategy 4.3.1 Provide opportunities for educators and students to analyze and evaluate online content.</li> <li>○ Strategy 4.3.2 Beginning in elementary, implement a programming curriculum that will provide the opportunity for students to learn computer science.</li> <li>○ Strategy 4.3.3 Ensure that all new District curriculum developed has a digital component fosters the 4 C's.</li> </ul>	<ul style="list-style-type: none"> <li>● Implementation of a standard digital curriculum.</li> <li>● The promotion of collaboration and creativity in delivery of student work</li> </ul>	2014 - 2015	Director of Digital Learning, Asst. Superintendent, Digital Learning Specialists
		<ul style="list-style-type: none"> <li>● Implementation of standard computer science curriculum across all levels with the hiring of additional qualified staff.</li> </ul>	2015 - 2016	
4.4 Students will represent their academic work, and experiences electronically.	<ul style="list-style-type: none"> <li>○ Strategy 4.4.1 Provide the infrastructure, hardware, software, and training for students to support the creation of electronic portfolios.</li> <li>○ Strategy 4.4.2 Establish a keyboarding program at the elementary level.</li> </ul>	<ul style="list-style-type: none"> <li>● Implementation student ePortfolio</li> <li>● Implementation of keyboarding programs at the elementary level</li> </ul>	2015 - 2016	Director of Digital Learning, Superintendent, Asst. Superintendent, Digital Learning Specialists, School Administration, School Committee
4.5 Students will be provided with a variety of assistive technologies to ensure diverse learning needs are met.	<ul style="list-style-type: none"> <li>○ Strategy 4.5.1 Examine software and hardware up for adoption to gauge and catalog its assistive technology (AT) features based on best practice AT guidelines.</li> <li>○ Strategy 4.5.2 Evaluate software and hardware to create a district catalog of AT best practices.</li> <li>○ Strategy 4.5.3 Evaluate and offer a variety of professional development courses available to help integrate many types of technology.</li> </ul>	<ul style="list-style-type: none"> <li>● Implementation of iPad carts at the elementary level.</li> </ul>	2013 – 2014	Director of Digital Learning, Superintendent, Asst. Superintendent, Digital Learning Specialists, School Administration, School Committee
		<ul style="list-style-type: none"> <li>● Pilot 1:1 initiative at the 8<sup>th</sup> grade and 9<sup>th</sup> grade level</li> </ul>	2014 - 2015	
		<ul style="list-style-type: none"> <li>● Implementation of 1:1 laptop initiative grades 6 - 12</li> </ul>	2015 - 2016	

4.6 Utilization of powerful digital tools and content to provide effective instruction to all students.	<ul style="list-style-type: none"> <li>○ Strategy 4.6.1 Evaluate 1:1 programs to assess how effective they would be in meeting diverse learning needs.</li> </ul>	<ul style="list-style-type: none"> <li>● Implementation of iPad carts at the elementary level.</li> </ul>	2013 – 2014	Director of Digital Learning, Superintendent, Asst. Superintendent, Digital Learning Specialists, School Administration, School Committee
	<ul style="list-style-type: none"> <li>○ Strategy 4.6.2 Provide professional development to 8<sup>th</sup> &amp; 9<sup>th</sup> grade teachers to prepare them for teaching in a 1:1 environment.</li> <li>○ Strategy 4.6.3 Prepare students for a 1:1 laptop initiative</li> </ul>	<ul style="list-style-type: none"> <li>● Implementation of classroom laptop carts for 8<sup>th</sup> grade teachers.</li> <li>● Implementation of Professional to support 1:1 pilot January pilot (8<sup>th</sup> &amp; 9<sup>th</sup> grade teachers)</li> </ul>	September 2014	
		<ul style="list-style-type: none"> <li>● Pilot 1:1 initiative at the 8<sup>th</sup> grade and 9<sup>th</sup> grade level</li> <li>●</li> </ul>	January 2015	
		<ul style="list-style-type: none"> <li>● Implementation of 1:1 laptop initiative grades 6 - 12</li> </ul>	2015 - 2016	