

**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 21st 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"> ○ Strategy 2.0.1 Determining student learning action plan (teaching and learning) Considering: <ul style="list-style-type: none"> ● Impact of Technology on Teacher Role ● Patterns of Teacher Use (teacher’s proficiency with technology) ● Design of Instructional Setting ● Curriculum Areas ● Patterns of Student Use ○ 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. 	<ul style="list-style-type: none"> ● Accessibility to technology that supports teaching and learning ● Implementation of digital learning professional development plan 	<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"> ○ Strategy 2.1.1 Provide student access to online courses for credit. ○ Strategy 2.1.2 Provide the infrastructure, software portal resources, and educator training necessary to support online learning for students ○ Strategy 2.1.3 Additional course offerings at the high school 	<ul style="list-style-type: none"> ● Implementation of EDx curriculum at the high school, which provides students access to online courses for credit. ● Expanded course offers provided to students. ● Implementation of Innovation Lab & Student Help Desk at HS level. 		
<p>2.2 Educators and students will become proficient in safe and productive Internet use.</p>	<ul style="list-style-type: none"> ○ 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. 	<ul style="list-style-type: none"> ● Implementation of documented benchmarks and assessments that are aligned to Massachusetts State Framework and ISTE NETs for teachers and students. ● Accessibility to technology that supports teaching and learning 		

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"> ○ Strategy 3.1.1 Provide training and coaching support to curriculum writing and revision teams to improve technology integration. ○ Strategy 3.1.2 Provide job-embedded professional development to create and implement content-specific technology-infused learning activities. ○ Strategy 3.1.3 Provide a variety of online learning resources for educators to improve their instruction. ○ Strategy 3.1.4 Train staff on digital learning based activities for differentiation and personalized learning 	<ul style="list-style-type: none"> ● Implementation of digital learning professional development plan which includes: <ul style="list-style-type: none"> ○ APS TechCon Technology Conference ○ Expand Tech Byte Technology Series ○ Tech Byte Newsletter ○ Summer Academy ○ EdCamp ○ Mentor/mentee program ● Implementation of learning management system (LMS) to disseminate and curate resources for staff. 	<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"> ○ Strategy 3.2.1 Develop elementary, middle, and high school curriculum, identify benchmarks, and align assessments for each level. ○ Strategy 3.2.2 Identify those areas of the curriculum where technology can be integrated into the teaching and learning. 	<ul style="list-style-type: none"> ● Integration of digital learning into the curriculum at the elementary level. ● Implementation a web presence for all staff/departments and classes ● Utilize cloud based applications ● Implementation the use of a Learning Management System (LMS) for both students and teachers. 	<p>2014 - 2015</p>	<p>Director of Digital Learning, Superintendent, Asst. Superintendent, Digital Learning Specialists, School Administration</p>
	<ul style="list-style-type: none"> ○ Strategy 3.2.3 Research online textbooks 	<ul style="list-style-type: none"> ● Implementation online textbooks and curriculum resources 	<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"> ○ Strategy 4.1.1 Ensure appropriate staffing and funding across the district, establishing Digital Learning Specialist at all levels. 	<ul style="list-style-type: none"> ● Equity across the district in all schools at all levels. ● Hire additional faculty to implement plan. 	<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"> ● Strategy 4.2.1 Provide learning experiences that promote cross-class, cross district collaboration and communication through online digital Web 2.0 Tools ● Procure and implement a learning management system for students and teachers that incorporates: <ul style="list-style-type: none"> ○ Asynchronous and synchronous learning environment ○ Data management component ○ Support Google App or cloud based learning ○ Data migration between SIS system ○ Embedding external multimedia ○ Streaming content ○ Record sessions ○ Hybrid Courses ○ Assessment Tools ○ Integrated message system (chat, reminders, email component) ○ Group and discussion forums ○ Assessable user created/copyright free content 	<ul style="list-style-type: none"> ○ Pilot LMS for teachers 	<p>2013 – 2014</p>	<p>School committee, Director of Digital Learning, School Administration, Assistant Superintendent</p>
		<ul style="list-style-type: none"> ○ Implementation of teacher LMS ○ Pilot LMS with Student 	<p>2014 - 2015</p>	
		<ul style="list-style-type: none"> ○ Implementation of Student LMS 	<p>2015-2016</p>	

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

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