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.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Action Steps</th>
<th>Progress Benchmarks</th>
<th>Time Frame</th>
<th>Action Team</th>
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</table>
| 2.0 Teachers will successfully participate in a robust PD Environment that includes online and blended courses. | o Strategy 2.0.1 Determining student learning action plan (teaching and learning) Considering:  
- 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. |  
- Accessibility to technology that supports teaching and learning  
- Implementation of digital learning professional development plan | 2013 - 2015 | Director of Digital Learning, Digital Learning Department, Tech Task Committee, Advisory Committee, Assistant Superintendent |
| 2.1 Students will successfully participate in online and blended courses by the time of graduation. | o 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 |  
- 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. | | |
| 2.2 Educators and students will become proficient in safe and productive Internet use. | o 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. |  
- 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.

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| 3.1 Educators will develop skills in interactive, engaging, adaptive instruction, which incorporates the 4Cs. The curriculum will reflect effective integration of technology. | - 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. | - Implementation of digital learning professional development plan which includes:  
  - APS TechCon Technology Conference  
  - Expand Tech Byte Technology Series  
  - Tech Byte Newsletter  
  - Summer Academy  
  - EdCamp  
  - Mentor/mentee program | 2013 – 2015 | Director of Digital Learning, Superintendent, Asst. Superintendent, Digital Learning Specialists, School Administration |
| 3.2 Develop a consistent digital learning curriculum with identified benchmarks for every grade level. | - 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.  
- Strategy 3.2.3 Research online textbooks | - 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.  
- Implementation online textbooks and curriculum resources | 2014 - 2015 | Director of Digital Learning, Superintendent, Asst. Superintendent, Digital Learning Specialists, School Administration |

Andover Public Schools  
Updated Strategic Plan – 6/20/2014  
Technology Task Force  
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### Strategy 4: Afford students with opportunities to apply technology effectively to gain knowledge, develop skills, and create and distribute artifacts that reflect their understanding.

| 4.1 Educators will have access to pedagogical and coaching support for integrating technology into teaching and learning. | Strategy 4.1.1 Ensure appropriate staffing and funding across the district, establishing Digital Learning Specialist at all levels. | ● Equity across the district in all schools at all levels.  
● Hire additional faculty to implement plan. | 2014 – 2015 | School committee, Director of Digital Learning, School Administration, Assistant Superintendent |
| --- | --- | --- | --- | --- |
| | ● 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:  
  ○ 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 | ○ Pilot LMS for teachers | 2013 – 2014 | School committee, Director of Digital Learning, School Administration, Assistant Superintendent |
| | | ○ Implementation of teacher LMS  
○ Pilot LMS with Student | 2014 - 2015 |
| | ○ Implementation of Student LMS | | 2015-2016 |
### 4.3 Students and teachers will become proficient in digital and information literacies.

| Strategy 4.3.1 Provide opportunities for educators and students to analyze and evaluate online content. | Implementation of a standard digital curriculum. | 2014 - 2015 | Director of Digital Learning, Asst. Superintendent, Digital Learning Specialists |
| Strategy 4.3.2 Beginning in elementary, implement a programming curriculum that will provide the opportunity for students to learn computer science. | The promotion of collaboration and creativity in delivery of student work | 2014 - 2015 | Director of Digital Learning, Asst. Superintendent, Digital Learning Specialists |
| Strategy 4.3.3 Ensure that all new District curriculum developed has a digital component fosters the 4 C’s. | Implementation of standard computer science curriculum across all levels with the hiring of additional qualified staff. | 2015 - 2016 | Director of Digital Learning, Asst. Superintendent, Digital Learning Specialists |

### 4.4 Students will represent their academic work, and experiences electronically.

| Strategy 4.4.1 Provide the infrastructure, hardware, software, and training for students to support the creation of electronic portfolios. | Implementation student ePortfolio | 2015 - 2016 | Director of Digital Learning, Superintendent, Asst. Superintendent, Digital Learning Specialists, School Administration, School Committee |
| Strategy 4.4.2 Establish a keyboarding program at the elementary level. | 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.

| 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. | Implementation of iPad carts at the elementary level. | 2013 – 2014 | Director of Digital Learning, Asst. Superintendent, Digital Learning Specialists, School Administration, School Committee |
| Strategy 4.5.2 Evaluate software and hardware to create a district catalog of AT best practices. | Pilot 1:1 initiative at the 8th grade and 9th grade level | 2014 - 2015 | Director of Digital Learning, Asst. Superintendent, Digital Learning Specialists, School Administration, School Committee |
| Strategy 4.5.3 Evaluate and offer a variety of professional development courses available to help integrate many types of technology. | Implementation of 1:1 laptop initiative grades 6 - 12 | 2015 - 2016 | Director of Digital Learning, Asst. Superintendent, Digital Learning Specialists, School Administration, School Committee |
4.6 Utilization of powerful digital tools and content to provide effective instruction to all students.

<table>
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<th>Strategy</th>
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<th>Implementation</th>
<th>Timeframe</th>
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<tbody>
<tr>
<td>4.6.1</td>
<td>Evaluate 1:1 programs to assess how effective they would be in meeting diverse learning needs.</td>
<td>Implementation of iPad carts at the elementary level.</td>
<td>2013 – 2014</td>
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<tr>
<td>4.6.2</td>
<td>Provide professional development to 8th &amp; 9th grade teachers to prepare them for teaching in a 1:1 environment.</td>
<td>Implementation of classroom laptop carts for 8th grade teachers. Implementation of Professional to support 1:1 pilot January pilot (8th &amp; 9th grade teachers)</td>
<td>September 2014</td>
</tr>
<tr>
<td>4.6.3</td>
<td>Prepare students for a 1:1 laptop initiative</td>
<td>Pilot 1:1 initiative at the 8th grade and 9th grade level</td>
<td>January 2015</td>
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<td></td>
<td></td>
<td>Implementation of 1:1 laptop initiative grades 6 - 12</td>
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