Augusta School Department’s Technology Plan 2015-2018

Cony (grades 7-12)

Farrington Elementary School

Sylvio Gilbert Elementary School

Lillian P Hussey Elementary School

Lincoln Elementary School

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Vision and Goals:

2. Community and Parental Involvement - Involve a broad representation of the school community in the planning process. Include a description of how the technology will be used effectively to promote community and parental involvement and increase communication with parents, including a description of how parents will be informed about the technology and its proper use.

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The Augusta School Department’s web site (www.augustaschools.org) will continue to serve as a primary communication tool to provide information for the community. To ensure a cohesive look to our web site, we have contracted with an external web site hosting partner. Additional web pages are added as we discover new and innovative ways to reach students, parents, and interested community members. Our web site includes information on:

- Schools – Staff Information; Student and Staff recognition; Classroom web pages; Programs; Newsletters; Schedules; Honors & Awards; Parent Viewer for grades, attendance and discipline; Student web links; Celebration of school events;
- Augusta Board of Education - Mission; Vision; Committees; Agendas; Meeting Minutes; Policies; Superintendent’s Weekly Newsletters; Public input forms; Budget
- Curricula & Assessment- Rubicon Atlas Curriculum Mapping, a web based curriculum mapping system, to reference curriculum and document units for the courses/subjects taught, opened to the public effective school year 2013
- District Programs – Adult Education; Building & Grounds Projects; Employment opportunities; Food Services; Library Services; Lunch menus; Sports; Technology
- District and School Calendars
- Calendars of events and professional development
- Contact Information – location, email and telephone extensions of staff
- Augusta School Department’s Mission, Vision, and Core Beliefs
The Augusta School Department utilizes a data management system that assures parental access to children’s information such as attendance, discipline and grades via the Internet. Upon request, parents of Augusta students as well as parents of students from sending schools of the Capital Area Technical Center (CATC) may obtain a User login and Password for their student(s), grades 4-12.

Telephone access in every classroom and electronic mail for all staff will continue to be supported. These systems provide all teachers with ready access to a vital means of communication with parents and a safety mechanism in the event of a crisis. The communication system enables easier interaction among staff, schools, and other city officials. The new telephone system is now compliant with Enhanced 911 mandates. The school department subscribes to School Messenger, “a leading provider of on-demand notification solutions for the education market.” (http://www.schoolmessenger.com/company/). Telephone lists for all schools are updated daily and administrators use the system for school closings, event information and in times of crises.

The Augusta Boys and Girls Club for Teens (ABG Club) is an after school community program for teens operated by Capital Kids. Currently, The Boys and Girls Club is supported by the United Way. They employ technology in the following manner:

* They have a technology center/computer lab that is an important part of the program. It provides access to the Internet as well as the ability to do homework for low-income youth, and is actively used. Students also utilize computers during the Alternatives to Suspension program to complete homework and research projects to help them successfully return to school.
* The technology center allows youth to develop practice in graphic arts and digital photography through classes and summer camps with trained staff.
* Their membership and data information are all kept on computer as well as communications with board members.
* Communications with youth board members, school staff and community supporters are frequently done by computer.

Many of the parents of children in their program do not have computer access or skills. They are invited to come and utilize the computers at this location. Currently located in the Buker Center, they receive technology support through their association with the Augusta Bureau of Recreation.

The Vision and Mission Statements of the ABG Club for Teens supports the Vision and Mission Statements of the Augusta School District in the quest to provide the Five Resources to community children and youth: A Caring Adult; Safe Places; Marketable Skills; Healthy Starts; and Opportunities for Community Service. Programs are strength-based and inclusive.

Augusta has Board approved policies relating to technology as follows: IJNDB: Student Computer and Internet Use and “Cyber Safety”, IJNDC: School Web Site Policy, EDC: Software & Equipment Policy for Augusta
Staff, GCSA: Employee Computer and Internet Use, and GCSA-R: Employee Computer and Internet Use Rules, for staff and students as well as a Media Release form for publicizing student names and/or pictures. As students enroll in our schools, parents and students will receive and be required to acknowledge notification and acceptance of those documents pertaining to the students. These forms are available in student handbooks and on our website. An Open House will be held yearly to inform parents of grade seven and eight students of technology policies and guidelines as we continue participation in the Maine Learning Technology Initiative (MLTI). Classroom teachers in grades K-6 discuss appropriate use of technology in individual classrooms. The new mathematics curriculum (My Math) at the elementary level is integrated with the Internet.

The CATC’s Advisory Committee is comprised of area superintendents, school board members, local and state business representatives, technology staff, and instructors from participating schools. They will continue to meet at least twice a year. Discussions involve financial planning, CATC’s technology programs, and current industry requirements.

Lithgow Public Library will continue to train and inform the community about the technology available and how to use it. Parents will be given copies of the Library's Internet Use and Procedures. Library staff will continue to highlight helpful websites in house and on the Library's web page. Library staff will continue to hold formal and informal technology training sessions for the public.

The school system has a Tandberg video conferencing system. Housed at CATC, the system is being used by school staff and may be utilized upon request by other groups.
3. **Vision** - Establish a vision statement linking the tools of technology with areas such as curriculum content, instructional practices, professional development strategies, and enhanced services. (If you have already established a school or district-wide vision statement you may use it rather than establishing a separate statement, so long as it encompasses the requirements above.)

The Augusta School Department believes that technology is integral to customizing teaching and increasing learning. We strive to narrow the digital divide that exists for our students. Every student has access to computers and the Internet at school, at home or in the community and increasing awareness of accessibility is ongoing. Augusta educators progressively integrate technology into their instruction to customize teaching and maximize learning. They are supported with opportunities for professional development, coaching and technical assistance. Students are allowed and encouraged to use technology to customize and demonstrate their learning in authentic ways. Students and parents have access to resources, curriculum and expectations as well as records of student achievement. All technology decisions and purchases such as computer to student ratios, hardware and software acquisition, professional development, etc. are based upon the positive impact the technology will have on students. To prepare our students for life beyond our educational setting we will utilize technology as seamlessly within our school as it is pervasively used and available outside of our walls.
4. **Goals** - Articulate specific goals, aligned with the Maine *Learning Results*, for using advanced technology to improve student academic achievement.

**Goal One:**

*Technology will be integrated into curricula, instruction, and assessment to promote student academic achievement.*

1. Technology will continue to be updated as technology changes and needs emerge within the district. (Curricula)
2. Students will be provided with ongoing multiple opportunities to enhance learning and demonstrate understanding through technology including the use of VEX robotics (Instruction)
3. Each teacher will have an integrated technology component. (Instruction)
4. Technology based assessments will be implemented and used to inform instruction. (Assessment)
5. Teachers will use technology (Rubicon Atlas System) to reference maps for instructional planning document personalized teaching of units for subjects/courses they teach. The maps will include: content, skills, assessments and resources for the unit. They will also identify the Maine Learning Results and/or Common Core State Standards that are covered during the unit. Maps will be reviewed vertically (K-12) for gaps and redundancies and also horizontally (across the grade level) to ensure consistency in instruction and alignment to standards. Having a clearly defined curriculum and standard alignment will improve student achievement and teacher effectiveness. (Instruction)
6. Staff will have access to specialists to support the integration of technology into instruction and assessment. (Instruction/assessment)
7. All Staff members will become proficient with technology to:
   a. communicate effectively
   b. plan for and implement rigorous instruction
   c. assess and analyze student achievement in order to customize instruction
   d. model creativity, critical thinking, planning, reasoning, decision making, digital citizenship for their students (Instruction)
8. Staff will be encouraged and supported to engage in continued technology professional development opportunities. (Curricular/instruction)
9. Teachers will meet or exceed [Teacher Technology Expectations](#) as approved by the Education Committee of the Augusta School Board (Curricular/instruction)
10. Students will demonstrate Digital citizenship in all aspects of their technology use (Instruction)

**Goal Two:**

*Our Learning Community will have ready access to current technology.*

1. All staff will have access to technology to enable them to integrate with curriculum, interpret district assessments and meet expectations.
2. Technology resources, including the infrastructure, will be maintained at current or greater standards and updated at the instructional and administrative levels within fiscal feasibility.
3. Augusta Adult & Community Education will utilize current technology in addition to providing technology classes available for the community.

4. A variety of technology, including SmartBoards, projectors, document readers, scanners, digital cameras, and laptop computers, will be available to each classroom.

5. School libraries will have current technology necessary for research and resource circulation.

6. Parents of children grades 4 -12 will have access to attendance, discipline and grades.

7. Professional development will be continually offered in areas including but not limited to electronic bulletin boards (Moodle), Google Classroom and Google Drive based upon need.

Goal Three:
*The Augusta School Department will have current information and administrative systems for a transparent and efficient educational environment.*

1. Current information will be available to the community on the Augusta School Department’s web site including school information, curricula, program information, contact information, school board information, and budget data.

2. Library resources for circulation and research will be available electronically throughout our learning community.

3. Accurate information on each student will be maintained electronically including but not limited to attendance, academic performance, discipline, health, and demographic information.

4. Administrators will be capable of facilitating communication of electronic data to include staff attendance, payroll and personnel information, assessment results, state and federal reports, work orders, purchase orders, and inventory.

5. The food service program will continue to use technology to track school nutrition and provide parents with a means of prepaying meals.

6. A security system and firewall will be maintained to ensure network and community member safety.

7. Security cameras are in place at the Cony-CATC campus and at entry points of the elementary schools.

8. We are implementing Vigilance Software from Norris Inc. Administrative offices currently have a “panic” button in each school. The software will replace the physical button with an onscreen application tied directly to the police station. As we work more thoroughly with the software, we anticipate using email and texting to allow staff to contact in house security and administration should the need arise.

9. Nightly updates to food services, School Messenger and possibly Transfinder will take place to ensure the most up to date data is available.
Assessment:

5. Technology/Technology Integration Assessment - Include a technology and technology integration assessment. Gather information about technology currently in use so that what will be needed to meet new goals can be determined. Address how the use of technology in the schools is currently assisting teaching and learning goals. Include a list of the equipment acquired and actions taken since the writing of the last technology plan that are currently helping the SAU reach its desired learning outcomes.

To accomplish our goals, we need to maintain, update and increase technology within budgetary constraints.

- Students have ready access to technology.
  - One to one computing is in place in grades four through six throughout the district.
  - Two mobile carts at the elementary level may be signed out by teachers for classroom use.
  - Former computer labs have been made into project rooms to house a projector, portable SmartBoard, and Media Station.
  - All grade 7 & 8 students continue to use MLTI laptops if provided by the state of Maine. While it is unclear as to the status of future deployment by the Maine Department of Education, it is our intent to continue as much one to one use as is possible within budgetary constraints.
  - Students in grades 9-12 are issued netbooks/laptops each year.
  - School libraries have thin clients to enable easy access to Sierra.
  - High school students are able to check out a laptop for the day as necessary.

- Every teacher has the technology to prepare and conduct lessons using technology.
  - A Computer Lab Technician assists teachers with integration.
  - At Cony, one-to-one computing is in place. Ancillary technology such as SmartBoards, projectors, and tuners allow DVD use from the teachers’ stations; wireless connectivity is in place throughout the school; electronic microscopes and interactive response systems are and will be supported and increased as budget allows.
  - SmartBoards are in place in the majority of grades six through twelve classrooms and we will continue to purchase additional units as funding permits.
  - At the elementary level each K-6 classroom teacher has a computer, projector and document reader for their exclusive use. Additional document readers are available on loan through the Media Centers.
  - Each K-4 classroom has a computer station consisting of two network connected student workstations.
  - Every staff member has access to computer equipment and connectivity. Each employee is provided with individual logins and email and given a secure storage area which is fully accessible through any outside internet service provider. In addition, teachers and administrative staff are supplied with personal voicemail.
- In every building technology resources such as projectors, digital cameras and camcorders, scanners, multi-function printers, SmartBoards, interactive response systems, document readers, and microscopes, are an option for teachers to use.

- Math and Literacy mentors encourage and support integration of technology in classrooms to customize instruction, collect and analyze data, and demonstrate learning.

To accomplish our goals we will need to maintain and/or upgrade our current Internet connection. Through this service, we are able to provide staff and 7-12 students with Internet access, email, and remote computing. A number of our learning activities are dependent on this access. For example, Plato, BrainPop, IXL Math and Alldata are Internet based packages which support school classroom instruction.

Our internal fiber optic multi-building network distributes Internet and phone connectivity as well as centralized network services to all of our buildings and many of the city facilities. Teachers are able to easily communicate with one another by dialing an internal extension. They also use the network to maintain student records (attendance and grades) which in turn allows parents to have real-time looks at their students’ school activities. All classroom teachers are expected to create and maintain their own web page and are offered multiple opportunities for training each year.
**Actions:**

6. **Action Plan** - Develop a step-by-step action plan, with timeline, that includes goals, activities, centered on academic achievement and teacher effectiveness, required hardware and software, costs, and funding sources. Describe the type and costs of technology to be acquired and how it fits within the current structure (use the list developed in the technology assessment #4, above). Designate sources of funding, specifically Ed Tech Funds, E-Rate funds, and funds from Federal programs, and state and local sources that support technology acquisition and integration.

- **Integration of Technology with Curricula, Instruction, and Assessment** - Describe how various curricula and teaching strategies that integrate technology effectively into the general curriculum and instruction will be identified based on a review of relevant research. Outline how it will be integrated and promoted throughout the SAU into curricula, instruction, and assessment and include a timeline for this integration.

Technology integration in Augusta is an integral part of the overall curriculum. Teachers and students use technology as a tool for exploration, analysis, synthesis, organization, manipulation and creation of information. Technology integration enhances student learning through the use of various publishing and multimedia software, networked computers, printers, scanners, and digital and video cameras. Teachers are encouraged to facilitate project-based lessons and explore ways to utilize the school district’s hardware and software resources with the goal of successfully enriching and enhancing the education of all students in their journey to becoming effective communicators, collaborators, publishers and problem solvers in our increasingly complex information-based society.

Our adopted technology standards are based on the ISTE standards and will be revisited in future years. Digital Citizenship to include Internet Safety and Cyberbullying will be a standardized curriculum throughout the district as prescribed by school board policy. At present, teachers work individually or with the technology educational technician to plan and execute common lessons at some grade levels.

Exploration of innovative software and other learning materials will continue. At the elementary level, a time will be set aside weekly for students in grades 2-4 to utilize computers in their classroom. Additionally, teachers in grades K-4 will have a classroom set of laptops available for use. Students and teachers in grades five and six will have one-to-one computing via carts and printers in their rooms. Computer specialists will work with the staff to develop lessons that will integrate technology into the various curricula. Currently software, applications and online programming are being used to support integration of technology in the academic and specialty areas. Examples of software programs used include *iWork, Clock Faces, ABC World, Lexia,* and *Type To Learn.*

Internet web sites currently used to enhance student learning include *PLATO, Starfall, Brain Pop, Khan Academy, My Math, SumDog* and *IXL Math.* We continue to evaluate the usefulness of web site subscription services such as *BrainPop, IXL* and *SumDog.*

Each school has digital cameras, scanners, microscopes, projectors, printers, document readers, interactive assessment systems and SmartBoards to be used as tools to augment the curricula.
As part of the program, MLTI sponsors regional content meetings and MLTI minutes where teachers can learn about integrating technology within their content areas. Our district staff will continue to offer local technology professional development to help others learn how to best use the software and hardware while integrating within their curricula. Training at the district level will be offered in the use of technological tools, including but not limited to the SmartBoard, Senteo, Google Apps, Edmodo and Moodle.

Teachers are required to create web pages that will provide additional information for students and parents as well as the community at large. Parent response to this requirement is positive.

At the high school level, students will continue to utilize technology as a primary tool. Many book publishers provide student/teacher resources through the Internet and teachers may elect to employ Google Apps and/or Moodle with their classes. Examples of the computer as a primary tool are:

*English/Language Arts: research, word processing, Smartboards, document cameras and digital presentations.
*Math: Graphing Calculators, CBRs and SmartBoards are available for use within math classes. Software programs available used: GeoGebra and TI Interactive for students and MathType and TI Smartview for teachers.
*Science: Boreal digital microscopes, SmartBoard technology, lessons that are provided through the internet by the textbook companies, proposed hybrid class
*Guidance: CHOICES – software program that assist students in determining future aspirations; Accuplacer.
*World Languages: listening to languages spoken, read in another language, use of Youtube, online portfolio, Rosetta Stone
*Social Sciences: PowerPoint presentations from textbook manufacturers, interactive assessment

At the Capital Area Technical Center the following programs will continue to utilize technology:
*Auto-Collision Repair
*Automotive Technology
*Business Academy
*Computer Technology
*Drafting Technology
*Electricity
*Health Sciences
*Machine Tool Technology
*Plumbing and Heating
*Printing Technology

Staff will continue to use technology to create informational notices, worksheets, assessments, WebQuests, web pages, rubrics, charts, grades, etc. They will also use technology as a communication and research tool. The Internet will continue to be a resource of vast information such as lesson plans, tutorials, rubrics, assessments, and references. Rubicon Atlas is vital for all teachers to build and share curriculum maps that are aligned with our state educational standards.
As we acquire new hardware and software, it is paramount that professional development be available to assist staff in using the equipment appropriately. The most difficult barrier to implementing such professional development is time.

- **Strategies for Improving Academic Achievement and Teacher Effectiveness** – Describe how funds, specifically Ed Tech funds where applicable, will be used to improve academic achievement, including the technology literacy of all students attending schools served by the SAU.

Computer specialists and other experienced technology staff will assist teachers in using the latest software and hardware to integrate technology within their various curricula. Local funding and grant funds will compensate staff to provide professional development when instruction occurs beyond their regular duties. Professional development will increase the staff’s technology competence and in turn will prepare them to teach their students to use technology in an integrated and productive manner. Middle and high school teachers and administrators will have access to technology integration workshops through MLTI; and we will continue to offer technology training on both a formal and informal basis throughout the year. We seek to improve every student’s technology literacy in addition to academic achievement through the use of effective integration of technology resources.

Professional development funds will also provide support for the staff to participate in other technology development offered outside of the school department. Seminars, conferences, and/or courses may include but are not limited to:

- MAINEducation sponsored by the Association of Technology Educators of Maine.
- MLTI sponsored training
- Summer Technology Institutes
- College courses/online courses
- Individualized training
- Professional Learning Communities

Current technology will be provided to improve student instruction using visual projection tools such as projectors, document readers and SmartBoards. Additional hardware such as sensors, microscopes, scanners, interactive response systems and digital cameras will be available to enhance student learning.

Data management software allows for accurate, consistent, and comprehensive measurement of student progress, achievement and success. This information management software links with the Maine Education Data Management System (MEDMS) to assist in the Department of Education’s state and federal reporting requirements. Teachers are required to electronically manage grades, attendance and track student performance
in relation to the Common Core State Standards, and Maine Learning Results as well as local district assessments in reading, writing and early numeracy. The software will also enable Response to Intervention (RTI) tracking through a counseling package.
Each teacher will use the Rubicon Atlas System, a web based curriculum mapping system, to reference curriculum and document units for the courses/subjects taught. The maps detail content, skills, assessments and resources and identify the Common Core Standards/Maine Learning Results that should be met during the unit. Maps are reviewed vertically (K-12) for gaps and redundancies and horizontally (across the grade level) to ensure consistency in instruction. Since the maps have gone through the review process and teachers are comfortable with the quality, parents and students have access to portions of the maps since January 2013 (Grade Level Expectations (GLE), Standards, Content and Skills covered.) Within the district, teachers are able to access all maps. This transparency will provide resources and support for teachers, novice and veteran alike.

The mapping process will allow us to locate technology integration and gather reports on which subjects/teachers have units that implement technology. These reports will be shared with staff and used for goals setting purposes as well as indicate which subjects need support for integrating technology. Having a clearly defined curriculum that aligns to the standards will improve student achievement and teacher effectiveness.

- **Professional Development** – Describe how ongoing, sustained professional development for teachers, principals, administrators, and school library media personnel will be provided to further the effective use of technology in the classroom and library media center. Describe how funds expended will improve the capacity of all teachers in schools served by the SAU to integrate technology effectively into their own curricula and instruction.

Professional development will be provided for all staff throughout the year. The timing will be varied to include after school, early release days, workshop days, and during vacations as well as release time from classes. While we will utilize our own technology expertise, staff members will be supported and encouraged to find training that meets their needs.

Web-based software tutorial programs such as those found at Microsoft, Google and Smarttech will be considered for staff development. Staff may access training of this nature from home or from school. Moodle, Edmodo, and Google Drive may also be used to provide professional development. The Department of Education provides additional training both through face to face as well as web based access to resources.

Staff will be notified of upcoming technology professional development available throughout the state. The Computer Lab Technician will update the Upcoming Technology Professional Development web page: [www.augustaschools.org/technology_in_our_schools.php](http://www.augustaschools.org/technology_in_our_schools.php). Additional information may be published in a newsletter that will be posted and a link emailed directly to staff. Staff will be informed about alternative ways to participate in professional development such as online courses, local college courses, community classes, and distance learning opportunities. The Augusta School Department will investigate the use of course management
systems, such as Moodle or Google Classroom, whose function is to assist educators in the creation and management of online courses.

Library media personnel have district funding for staff development outside the district and the K-12 library coordinator is given workshop days and early release days for staff development activities. Some activities are "field trips" to other places for training and other trainings involve guest speakers working in-house with the library staff. The K-12 library coordinator is also available for the staff for one-on-one training situations if necessary. The K-12 library coordinator runs workshops and orientations for students and faculty using the mobile labs throughout the year on various topics.

Funds will be available for staff to attend conferences and seminars throughout the state such as those sponsored by ACTEM. Staff will be encouraged to participate in courses offered by the state and MLTI. Members of ACTEM may also secure professional development scholarships from that organization.

Professional Learning Communities and Book Studies for staff are supported by online platforms such as social networking sites, Google Drive, file sharing sources (SQWORL, Pinterest) to increase professional participation and dissemination of resources.

- **Supporting Resources** – Describe the supporting resources such as services, software, other electronically delivered learning materials, and print resources that will be acquired to ensure successful and effective uses of technology.

The Augusta School Department uses many services and software applications to ensure productivity through the use of easily accessible computer hardware and software tools. Local professional development opportunities are provided in the district. E-mail is provided for all Augusta School Department employees. Teachers have a laptop assigned to them for research, communication, publishing and assessment purposes. Teachers at all grade levels utilize Web2School software to track attendance, discipline, RTI and grades. This software package will be used at all schools to store additional achievement data.

Students and parents are able to deposit money on account through Pay Pans for use in the school food service program. The program allows parents to check on what students are purchases and balances by contacting the food service manager at their student’s school. The PCS Revenue Control Program at each school assigns each student an identification number that is then used as they purchase meals to support accounting for school lunch reimbursements. It also lets students remain anonymous as to their socio-economic status.

Teachers and students have access to various software programs depending on grade level. We plan to maintain our current software and will continue to explore additional programs. Textbooks frequently are accompanied by electronic resources such as test-builders, worksheets and presentations; these items will be made available to the teachers upon request. Rubicon Atlas Curriculum Mapping will be an integral part of each teacher’s working toolbox to access the district’s curriculum and to document their personal instruction.
We assure safe access to the Internet. This may involve updating security software as well as more current servers and other hardware. We continue to expand our use of electronic learning via Moodle, Edmodo and Google Apps.

All schools and buildings within the district are now and will remain wireless environments. The high school campus has a public WiFi for students and visitors to use with personal computers after school hours and the city has a downtown WiFi. We are investigating the use of personal technology devices during school hours and its impact on the network.

Our web page will continue to be updated and will contain resources available for staff. These resources will include web sites with the following resources:

* Methods of integrating technology
* Lesson plan sites
* Assessment sites
* Rubric sites
* Online tutorials/Online professional development courses

Frequent emails are sent out to staff to inform them of technology tips and resources as well as support for district initiatives which involve technology. The same tips will be stored on our server and/or Google Drive. Web sites that require yearly subscriptions such as BrainPOP, AllData, Plato, QuickBooks, Adobe and IXL Math will be evaluated as important supporting resources and subscribed to within budgetary constraints. We will also evaluate subscriptions to web-based software tutorials such as Atomic Learning, Microsoft, Smart, and Tech4Learning that provide on-demand training.

Since our partnership with the City of Augusta for the sake of technology, our technology support staff has increased and we now have access to four full-time computer technicians whose primary job is to ensure that the technology is working. With the online and email support system, the educational community has a relatively short response turnaround time. Loaners are available at the high school level.

As a service offered by the Maine InfoNet, Sierra, the library's card catalog, supports library services in that it organizes books, AV equipment and other materials through one central database, so that staff and students can use many access points to find the items they need. Software tracks items as they circulate in and out of the library aiding in the distribution of resources that are required to support all areas of the district's curriculum. None of this would be possible without the supporting technology of computers, networking (hubs, routers, T1 lines, servers, network cabling), barcode readers as well as the Internet. Printed barcodes act as a key access point to the entire system. Through the internet, Maine InfoNet offers several research databases collectively known as MARVEL!. These online electronic resources aid our patrons in their quest for information. The library staff works in conjunction with the technology staff to offer hands on instruction to the students and the staff on how to use the Internet, Sierra, and the Maine InfoNet MARVEL! databases.
Goal One: Technology will be integrated into curricula, instruction, and assessment to promote student academic achievement.

<table>
<thead>
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<th>Activity</th>
<th>Hardware/Software/Personnel</th>
<th>Costs</th>
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<tr>
<td>Technology will continue to be updated as technology needs emerge within the district.</td>
<td>Technology Curriculum Committee members facilitated by Director of Technology</td>
<td>Special project compensation</td>
<td>Local school budget, Title VI</td>
<td>2015-2018 (ongoing)</td>
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| Students will be provided with ongoing multiple opportunities to enhance their learning through technology.                    | 1. All teachers and staff  
2. Software/subscriptions  
3. Software upgrades and additions | 1. Salaries  
2./3. As funding allows                                                       | Local school budget                                                   | 2015-2018 (ongoing) |
| Each teacher will have an integrated technology component within the core curricula.                                          | Personnel: Teaching and technology staff                                                  | Salaries; Compensation                                                 | Local school budget, Title II & VI    | 2015-2018 (ongoing) |
| Technology based assessments will be implemented and used to inform instruction.                                               | Administrators, teachers, computer specialists                                            | 1. Salaries                                                           | 1./3. Local school budget  
2. Title I                             | 2015-2018 (ongoing) |
| Teachers will use technology to reference maps.                                                                                | Administrators, teachers                                                                  | Salaries; Rubicon Atlas, $8450                                       | Local school budget, Title VI          | 2015-2018 (ongoing) |
| Staff will have access to specialists to support the integration of technology.                                                | Personnel                                                                                  | Salaries                                                              | Local school budget                   | 2015-2018 (ongoing) |
| All staff will become proficient with technology                                                                             | Personnel                                                                                  | Salaries                                                              | Local school budget                   | 2015-2018 (ongoing) |
| Teachers will meet or exceed Teacher Technology Expectations                                                                 | Personnel                                                                                  | Salaries;                                                            | Local school budget                   | 2015-2018 (ongoing) |
| Students will be taught and will demonstrate Digital Citizenship                                                              | Personnel                                                                                  | Salaries                                                              | Local school budget                   | 2015-2018 (ongoing) |
Goal Two: *Our Learning Community will have ready access to current technology.*

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hardware/Software/Personnel</th>
<th>Costs</th>
<th>Funding Source</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>All staff will have access to technology</td>
<td>1. All teachers and staff  2. Software/subscriptions  3. Hardware/software upgrades and additions</td>
<td>1. Salaries  2./3. As funding allows</td>
<td>Local school budget/Title VI</td>
<td>2015-2018 (ongoing)</td>
</tr>
<tr>
<td>Technology resources will be maintained at current or greater levels</td>
<td>Personnel: Network Administrator, Director of Technology, technicians</td>
<td>Salaries</td>
<td>Local school budget</td>
<td>2015-2018 (ongoing)</td>
</tr>
<tr>
<td>Lithgow Public Library and the Augusta Adult &amp; Community Education program will have current technology in addition to technology classes available to the community.</td>
<td>Personnel; Systems Librarian (1 FT), Library Staff(1 FT, 1 PT)</td>
<td>Salaries</td>
<td>City Budget/Local school budget</td>
<td>2015-2018 (ongoing)</td>
</tr>
<tr>
<td>A variety of additional technology, including SmartBoards, projectors and laptop computers, will be available to each classroom.</td>
<td>SmartBoards, projectors, digital cameras, interactive response systems for each school</td>
<td>As funding allows</td>
<td>Local school budget/Title VI</td>
<td>2015-2018 (ongoing)</td>
</tr>
<tr>
<td>School libraries will have current technology necessary for research and resource circulation.</td>
<td>Hardware: Up-to-date computers</td>
<td>As funding allows</td>
<td>Local school budget</td>
<td>2015-2018 (ongoing)</td>
</tr>
<tr>
<td>Professional development will be continually offered.</td>
<td>Personnel; internet; face to face workshops</td>
<td>Salaries; Compensation; associated fees</td>
<td>Local school budget/Title II &amp; VI</td>
<td>2015-2018 (ongoing)</td>
</tr>
</tbody>
</table>
**Goal Three:** The Augusta School Department will have current information and administrative systems for a transparent and efficient educational environment.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hardware/Software/Personnel</th>
<th>Costs</th>
<th>Funding Source</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current information will be available to the community on the Augusta School Department’s website including school information, curricula, program information, contact information, School Board information, and budget data.</td>
<td>Staff; Revize; Rubicon Atlas; Facebook</td>
<td>Salaries: Rubicon Atlas, $8450; Revize, $4800</td>
<td>Local school budget</td>
<td>2015-2018 (ongoing)</td>
</tr>
<tr>
<td>Library resources for circulation and research will be available electronically throughout our learning community.</td>
<td>1. Sierra 2. World Book (remote) 3. Marvel</td>
<td>1. $3000 2. NA 3. $1100</td>
<td>Local school budget</td>
<td>2015-2018 (ongoing)</td>
</tr>
<tr>
<td>Accurate information on each student will be maintained electronically including but not limited to attendance, academic performance, discipline, health information, and demographic information.</td>
<td>Web2School</td>
<td>$10,800</td>
<td>Local school budget</td>
<td>2015-2018 (ongoing)</td>
</tr>
<tr>
<td>Administrators will be capable of facilitating communication of electronic data to include staff attendance, payroll and personnel information, state and federal reports, work orders, purchase orders, and inventory.</td>
<td>Software: MUNIS</td>
<td>$17,624</td>
<td>Local school budget</td>
<td>2015-2018 (ongoing)</td>
</tr>
<tr>
<td>The food service program will continue to use technology</td>
<td>PCS</td>
<td>$2,390</td>
<td>Local school budget</td>
<td>2015-2018 (ongoing)</td>
</tr>
<tr>
<td>A security system will be maintained to ensure filtering content for students and a secure firewall.</td>
<td>Software: BESS is supplied by MSLN; Sophos Filter, $6900; FatPipe, $6306; Sophos, $4000</td>
<td></td>
<td>Local school budget</td>
<td>2015-2018 (ongoing)</td>
</tr>
<tr>
<td>Security cameras are in place in the ASD</td>
<td>Support</td>
<td></td>
<td>Local school budget</td>
<td>2015-2018 (ongoing)</td>
</tr>
<tr>
<td>Nightly updates to food services, School Messenger and possibly Transfinder</td>
<td>Web2School; School Messenger; PCS</td>
<td>$18,440</td>
<td>Local school budget</td>
<td>2015-2018 (ongoing)</td>
</tr>
</tbody>
</table>
• **Innovative Delivery Strategies** – Describe how the development and use of innovative strategies for the delivery of specialized or rigorous courses and curricula through the use of technology, including distance-learning technologies, will be encouraged, particularly in areas that would not otherwise have access to such courses or curricula due to geographical distances or insufficient resources.

The Augusta School Department has its own Moodle and interfaces with Google Docs through Active Directory. The teachers are encouraged to utilize these course management systems in the creation and management of their courses, particularly at the advanced placement level. Advanced Placement courses are often not able to be offered for students at Cony due to low enrollment or time conflicts, so some of our students are enrolling in AP4ALL through the state.

Teachers at the high school are experimenting with the Flipped Classroom concept, a hybrid class is proposed for next year in Anatomy, digital portfolios are created to manage student progress toward standards, and students in grades 3-6 are using the Smarter Balanced practice tests to prepare for the upcoming state mandated assessments. There is an initiative at the high school to utilize online technologies as much as possible in order to become a paperless community.

The district has invested in a Tandberg system for remote communications. The technology is available for any staff member who chooses to identify and access instructional tools.

• **Steps to Increase Accessibility** – Describe the steps being taken to ensure that all students and teachers have increased access to technology. The description must include how Ed Tech funds, if applicable, will be used to help students in high-poverty and high-needs schools, or in schools identified for improvement or corrective action under Section 1116 of Title I; and how the steps taken will ensure that teachers are prepared to integrate technology effectively into curricula and instruction.

• As equipment loses its effectiveness, technology will be replaced within budgetary constraints. Updates to software will be also done in a timely manner. Our server farm has been updated and is now, for the most part, a virtual system. This ensures that the school community should see limited interruption in access to resources through our network.

Our district has a commitment to curriculum mapping and subscribes to Rubicon Atlas. All teachers are expected to reference maps for instructional planning, co-create district maps to align with state standards, and maintain diary maps which reflect their personalized instruction for the benefit of the students. The teachers are working to develop common assessments that will be included in the district curriculum maps.

Professional development will continue to be offered system-wide. All staff will have opportunities to learn how to use the technology for a variety of purposes. Teachers will learn how to communicate, assess and integrate technology into curricula. Technology professional development will be supported during school with mentoring support, after school, during workshops, through online courses and/or during the summer months. Staff will be informed of in-district and out-of-district opportunities for technology education.
The technology support staff will ensure that the technology is working within reasonable limits. Staff will continue to be able to access our servers and their email remotely.

A Teacher Integration Self-Assessment will be conducted each year to monitor the progress of technology integration and use. Teachers will evaluate themselves on their use of computers to support learning, instruction and implementation with students. The teachers will also have the opportunity to evaluate the technology professional development in which they participated, and to express any future needs including hardware, software and training. Teachers will also explain how they use common technology-based assessments through the goal setting process and curriculum mapping.

Samples of web sites that include assessment aligned with the Maine Learning Results are:

Maine Math and Science Alliance (MMSA): http://mmsa.org
Maine Department of Education (MDOE): http://www.maine.gov/education

Additional supporting technology will be put in place as funding permits. Document readers, either Smart or iPevo, are in the hands of each K-6 classroom teacher with others available for loan through the Media Centers. Small handheld cameras as well as ipads and cameras in laptops that are capable of video are being used as tools for improving student learning through instruction.

Each summer, plans include maintenance and update of the student and teacher laptops, including installation of specialized teacher software at Cony as well as additional hardware as funding permits.

- **Collaboration with Adult Literacy Service – Describe how the program will be developed, where applicable, in collaboration with adult literacy service providers.**

Augusta Adult Education offers services that allow community organizations to have access to Adult Ed technology offerings. A service plan is in place that involves both in-kind contributions and fees for services. A working relationship also exists with local and state social service agencies, the Departments of Labor and Health and Human Services, Vocational Rehabilitation and the City of Augusta Welfare Department enabling educational services in technology. Computer classes are offered to Seasoned Workers and State Offices for their employees. Classes are also offered to Senior citizens in researching the internet and digital photography.

Augusta Adult Education works with local businesses to offer training programs in technology and software use of Microsoft Office Professional and Adobe products

Augusta Adult Education works with adult service providers to introduce their agency staff personnel to Kurzweill Scan/Read Program, My Skills Tutor and freeware literacy programs. These programs assist individuals wishing to improve their reading and math skills. Augusta Adult Education utilizes SmartBoard Technology, Odysseyware computerized curriculum, Jabber interactive technologies and wireless internet
capabilities to provide supportive technology to the classroom setting. Rosetta Stone is used in our labs for literacy with the English as a Second Language (ESOL) population.

Augusta Adult Education supplements classroom teaching with access to Odysseyware computerized curriculum which complements high school diploma work on-line and is designed to align its curricula with Common Core standards that are called College and Career Readiness Standards at the Adult Education level. Internet resources are used by students for including up to date information in their research projects. Our academic assessments used for pre and post skill level is accomplished by using ECASAS computerized assessments. This capability enables us to have a better idea of the skills that students enter our programs with and via the ECASAS post assessment; student gain is indicated for while they are in our program. We use Google docs as a tool for students to create documents and improve them incrementally through interactive instructor critique.

The Augusta Adult Education administrative assistants use the MaineStars data base that Maine Department of Education recognizes as the one data entrance point for all information regarding State and Federal accountability guidelines. This data base provides more opportunities for programs to assess their effectiveness in serving their citizens clients.

August Adult Education runs the Kennebec Learning Center which contains two computer labs housing 15 computers each, two computer labs housing 10 computers each and one mobile lab with 10 laptops. Several computers are designated for Accuplacer college entrance testing in conjunction with Kennebec Valley Community College (KVCC) and the University of Maine Augusta (UMA).

We also refer students to Lithgow Public Library, the Maine State Library, and the University of Maine Augusta Library who continue to provide computer access to the public and to support the school curriculum and life-long learning needs. Access includes internet, word processing, on-line databases, on-line catalog, e-books and printing capability. Access to on-line databases, e-book, and the on-line library catalog will be available off-site from any computer through the Lithgow Library website, http://www.lithgow.lib.me.us/. The network administrator and computer technicians continue to support the technology in Augusta Adult Education.
Accountability:

7. CIPA Accountability - Schools that apply for E-rate funding for Internet access, internal connections, or basic maintenance must comply with the Children’s Internet Protection Act (CIPA). CIPA compliance means that schools are filtering their Internet services with a technology protection measure and have implemented formal Internet Safety Policies.

For each school in the SAU, certify that it is in compliance with the CIPA provisions summarized below (and in depth at http://networkmaine.net/erate/misc/cipa-schools.pdf), and outline the actions taken to meet compliance.

- Internet Filtering Technology Protection Measure
  - Documentation of the protection measure [e.g. bills from a service provider or filter logs] must be retained for at least 10 years.

- Internet Safety Policy (Retain a copy of the policy for at least 10 years after the funding year in which it was relied on to obtain E-rate funding.)

- Public notice of and public meeting or hearing on the Internet Safety Policy
  - Retain documentation of public notice (e.g. flyer or newspaper notice) and the hearing or meeting (e.g. agenda and minutes) for at least 10 years after the funding year in which it was relied on to obtain E-Rate funding.
8. Accountability Measures – Describe the process and accountability measures which will be used to evaluate the extent to which the items described in the Action plan have been effective in integrating plan activities are effective in integrating technology into curriculum and instruction, increasing the ability of teachers to teach, and enabling students to reach Maine’s Learning Results.

A Teacher Integration Self-Assessment will be conducted each year to monitor the progress of technology integration and use. Teachers will evaluate themselves on their use of computers to support learning, instruction and implementation with students. The teachers will also have the opportunity to evaluate the technology professional development in which they participated, and to express any future needs including hardware, software and training. Teachers will also explain how they use common technology-based assessments through the goal setting process and curriculum mapping.

Records of local technology professional development offered will demonstrate the availability of courses as will the listings on the network and web pages. Records will also be maintained on each teacher’s participation in technology training.

Staff in each building will be encouraged to display samples of student work at least once each year highlighting the incorporation of technology into the curriculum. The possibility of student portfolios, to follow the students from grade K-12, will also be investigated more thoroughly and a plan will be developed.

The Technology Committee will meet at least twice a year to expand, evaluate and revise the current technology plan and expected standards in order to make them more useful and informative tools for measuring student progress in the area of technology.

The student data management system is used as a tool to measure student progress. The system allows for recording, monitoring and reporting of student data and will track assessment results by student, grade span, and/or school. IXL math and My Math will be used at the K-12 level to enhance and monitor student learning.

Lesson plans that are rich with technology integration will be collected from our staff as well as other sources and stored on our network for teacher access. As teachers use the lesson plans, feedback may be required from them in the form of a survey response. Curriculum maps will contain lessons and activities that enhance education through technology. We will also be able to search for any lessons that have technological resources attached to them. Content skills and standards are accessible to the general public.
**Teacher Expectations for Augusta Teachers**

The mission of the Augusta Schools is to provide all students with challenging, high quality educational programs in academic skills, life skills, career preparation, and citizenship. Students today use technology as part of their everyday lives. Ebooks, cell phones, television, ipods, ipads, itouches, iphones and a host of other technological devices are integral to our students and their families. As educators, we must be prepared to employ and support technology.

As a district, we believe in the National Educational Technology Standards (NETS●S) and Performance Indicators for Students and are implementing them into curriculum. The National Educational Technology Standards (NETS●T) and Performance Indicators for Teachers are a logical means to reaching our goals for students. These standards are:

1. Facilitate and Inspire Student Learning and Creativity
2. Design and Develop Digital-Age Learning Experiences and Assessments
3. Model Digital-Age Work and Learning
4. Promote and Model Digital Citizenship and Responsibility
5. Engage in Professional Growth and Leadership

In order to meet these goals, it is necessary that teachers in Augusta shall minimally be able to successfully implement the following:

**Computer functions**
- Turn on/off
- Find/open programs
- Open files
- Manage files
- Save files to the server
- Troubleshoot errors (dock, airport, printing)

**Word processing**
- Open a file
- Change fonts
- Save (in varied/appropriate formats?)
- Print

**Presentation**
- Open a file
- Create a slide show
Spreadsheet

- Open a file
- Save (in varied/appropriate formats?)
- Display data
- Make entries
- Sort data
- Enter simple formulas

Email

- Receive
- Send
- Send attachments
- Create contacts/groups
- Use the web interface of exchange if necessary

Internet

- Execute a simple search
- Find relevant information in a timely fashion
- Create a web page with the following items: biography to include contact information, homework/classroom expectations, newsletter, unified arts schedule (where appropriate)
- Demonstrate knowledge of ethical and legal issues relating to use of technology
- Demonstrate knowledge of district technology policies

Hardware and peripherals

- Demonstrate knowledge of
  - Scanners
  - digital cameras to take and download pictures
  - document reader to show a book or other typed material
  - projectors
- Demonstrate appropriate care for equipment

Library

- Use online card catalog (Sierra)
- Use online database (Marvel)