

# Regional School Unit #19

## Technology Plan 2014-2017

September 8, 2014

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### Regional School Unit #19

Corinna  
Etna-Dixmont  
Hartland  
Newport  
Palmyra  
Plymouth  
St. Albans

This plan is our roadmap for integrating technology into classroom practice and the organizational and management functions of the district. As we strive to educate world-class students, this plan will guide schools and departments in implementing technology activities appropriate to their individual needs while aligning with the district plan.

The plan describes:

- Our vision for using educational technology as a tool for student achievement.
- Ways technology will assist administrative, business, and instructional support functions.
- Our expectations for students and staff as users of technology.
- The state our technology today and our plans for the next three years.
- A plan for training staff to integrate educational technology with effective instructional and managerial functions.
- Our requirements for hardware, software, network configurations and applications. The Technology Committee addressed the fundamental questions:

What technological skills will ensure students are prepared for college, careers and citizenship? At R.S.U. #19, we believe that all students and staff must have equitable opportunities to develop and master both information literacy and technological proficiency. The district will take leadership in working with schools and community partnerships to ensure that all students and staff have equitable access to computers, quality information resources, on-going training, and technical support needed to develop this mastery.

#### 1. Community and Parental Involvement

The Technology Planning Committee includes a wide range of stakeholders, including District IT staff, teachers, administrators, students and parents. R.S.U. #19 maintains a comprehensive web site, which is available at [www.RSU19.org](http://www.RSU19.org). This Web site includes an interactive safety page, policies, school calendar, school board information, meeting agendas and minutes and secure staff logins for safety trainings. There are multiple ways for the community to interact with administration and staff through the web site. Announcements about upcoming meetings and events are also posted on the site. Links to all the schools and individual teacher web pages with information about special projects, homework, and resources are available. The school board posts budget information and other pertinent information for the citizens of the district.

Examples of integration of technology are routinely showcased throughout the year. Students share their learning with parents during student led conferences, academic exhibitions, open houses, student technology showcases, and Nokomis Warrior Broadcasting presenting technological achievements of district students and staff through the local access cable channel.

All R.S.U. #19 teachers, administrators, school board members, and support staff have email accounts. All e-mail addresses are listed on the web site. All students and staff grades 5 through 12 have accounts for digital work spaces. All students at grades 9 through 12 have a school email account.

R.S.U. #19 uses the student information management system (SIS) called Infinite Campus. Teachers enter grades and attendance for their students. That same data is available to the school, central office, parents and students. Students and parents have access to the Infinite Campus portal for their grades and schedules.

R.S.U. #19 is a Maine Schools for Excellence TIF 4 district. This grant provides funding for a variety of digital services, including NWEA, RANDA, Tripod Surveys, Greater School Partnership Surveys, 360 Surveys. Our technology supports the district opportunities for rigorous professional development, a new evaluation system for educators which focuses teacher and leaders to improve their methods.

## 2. Community-Wide Technology Vision Statement

The learning community of R.S.U. #19 will be technologically literate life-long learners. Learners will be able to interact successfully in a technological environment to achieve their personal, education and workplace goals. They will skillfully use technology to access, retrieve and use information school-wide, community-wide, nationally and

internationally. When integrated with the revised Learning Results and the National Standards in the school curriculum, technology becomes a valuable tool which provides information, increases student participation, broadens student's interest, stimulates student thinking, and encourages creative and practical problem solvers.

Our Technology Plan provides a baseline from which to measure the progress made toward technological implementation and a design for reaching District and community-wide goals for information access, employment, global communication, and self-directed, lifelong learning. The access and utilization of the tools of technology will benefit not only our students but also the Corinna, Hartland, Newport, Palmyra, Plymouth, St. Albans and Etna-Dixmont communities.

### 3. Goals

R.S.U. #19 is committed to continuous school improvement, quality service to the community and high achievement for all of our students. We strive to have all students achieve the goals established in the Guiding Principles of the Maine Learning Results. This technology plan is designed to address the district's Strategic Technology Goal and focus our efforts in connecting students and staff to educational technologies which show promise to strengthen and improve teaching and learning. The technology resources used by the district will be current and will be used effectively for instruction, communication and administration. The definition of Instructional Technology has been expanded to include not only computers, but all audio and video recording devices or other digital equipment. These will be referred to as "technology resources" throughout this plan.

Equity of Access for Educators, Students & Parents - R.S.U. #19 provides the learning community with greater opportunity for interaction, collaboration and information exchange. The school will become a vital meeting place for a host of community services. All students and staff of R.S.U. #19 have access to technology resources. All students and staff have access to computers in the classrooms and Library/Media centers. These facilities are available to people with disabilities. Purchases of all computer equipment, peripheral devices and appropriate software have been and will continue to be made in order to accommodate learners in all educational programs.

With the rapidly changing advances with mobile technologies, we continually implement methods to balance educational opportunities available with network security and student safety.

#### Goal 1 - Technology Integration

Objective 1.1: Students will be taught to use a variety of developmentally appropriate resources and productivity tools for clear and concise communication, presentation, and illustration of thoughts, ideas, and stories.

Objective 1.2: Students will be taught to use telecommunications and online resources efficiently and effectively to collaborate with peers, experts, and others to investigate and solve curriculum related problems, issues and information.

Objective 1.3: Students will be taught to research and evaluate the accuracy, relevance, appropriateness, and bias of electronic information.

Objective 1.4: Students will be taught to demonstrate legal and ethical behaviors regarding the use of technology and information.

Objective 1.5: The district will provide appropriate support to staff and students in way of Technology Integrators

## Goal 2 - Instruction

Objective 1.1: Students and staff will be taught how to responsibly use equipment and online access.

Objective 1.2: Staff will work with curriculum which is aligned with the technology standards found in the ISTE Student Standard Guide and will reference the Maine Learning Results and MLTI resources.

Objective 1.3: Staff will be trained in the application of technology throughout the classroom, school and district to improve academic achievement.

## Goal 3 - Online Learning

Objective 1.1: To assist students in becoming self directed learners, a variety of in-house and off campus online opportunities will be provided for students.

Objective 1.2: To offer a variety of in-house and off campus online opportunities for staff.

## Goal 4 - Equipment

Objective 1.1: To continue to make sure there is equity of equipment for all schools.

Objective 1.2: To provide equipment that support educational and curricular initiatives and integrates into classroom activities.

Objective 1.3: To provide all teachers and administrators with in-house training and the Middle School level teachers with MLTI trainings to optimize the use of equipment.

## Goal 5 - Safety

Objective 1.1: Students and staff will be provided information on how to follow all federal regulations.

Objective 1.2: Student access will be in compliance with federal regulations.

Objective 1.3: Students will be taught and have experience with creating a safe online presence.

## Goal 5 - Technology Usage

Objective 1.1: Students will receive lessons on appropriate usage of technology integrated into their studies. Starting in the middle schools, special attention will be given to the MLTI program.

Objective 1.2: Students will be taught and have experience with creating an online presence.

## Goal 6 - Community Involvement

Objective 1.1: The district will continue to improve community-school communication.

Objective 1.2: The district will continue to make online courses available for community and adult education.

Objective 1.3: The district will continue to involve a broad representation of the school community in the planning process.

#### Section 4. Identify Necessary Technology Summary of Existing Technology

At the present time, Nokomis has three computer labs – one with 22 computers, one with 20 computers, and one with 25 computers. These labs are used for classroom teaching in the subjects of General Computer Skills, Industrial Technology, Digital Photography, Microsoft Office certification, Accounting, and Computer Programming. Nokomis also has 24 mobile carts that house a total of 410 MacBooks used in classrooms. There are also 130 HP ProBook laptops available at the high school. There is a set of 25 Chromebooks in a technology focused history classroom.

The High School has a “multimedia technology classroom” where video productions are created for broadcast on Nokomis Warrior Broadcasting.

The Seabasticook Valley Middle School has a computer lab for 5th grade with 24 computers and a networked laser printer. There is a mobile lab with 40 MacBooks for the 5th and 6th grade. There is also a class set of 24 Chromebooks available as needed. In addition, there is a cluster of 8 computers in the library. Seabasticook Valley Middle School has a “multimedia technology classroom” where video productions are created for broadcast on Nokomis Warrior Broadcasting. All 7th and 8th grade students and staff have HP ProBooks provided through the MLTI program.

Somerset Valley Middle School has a PC laptop cart with 20 computers for the 5th grade. A mobile cart of 25 MacBooks for 6th grade and a networked laser printer. There is also a lab of 24 PC desktops available for all classrooms. In addition, there is a cluster of 8 computers in the library. All 7th and 8th grade students and staff have HP ProBooks provided through the MLTI program.

The Etna Dixmont School has MacBook’s available for all students in 5th and 6th grade. There is a lab with 18 computers. All 7th and 8th grade students and staff have HP ProBooks provided through the MLTI program.

The Hartland, St. Albans, Newport, and Corinna schools have mobile carts housing 25 computers with printers that are shared with 3rd and 4th grades. In addition, each of these schools have a classroom lab.

All teaching staff, administrators, and many support staff have laptops. Administrators have iPads. There are 5 iPads available in each Title 1 room at each school.

The department is staffed by a Director, a network administrator, a help

desk coordinator, a MLTI technical lead, one part time central registrar, one technology integrator.

The goal is to remove individual classroom printers with a managed, centralized system for secure printing. In an effort to streamline costs and reduce waste.

#### 5. Collaboration with Adult Literacy Service Providers

RSU 19 Adult Education is currently providing computer training of all levels utilizing Microsoft Office software on the District's network computers. Courses range from Introduction to Computers to MS Word, Excel, PowerPoint, Learning how to use Email, Social Networking, and sharing digital photos, etc. In addition to the computer training, students registered in Diploma or College Transitions courses utilize the computers or class assignments. Students enrolled in college classes are assigned network user accounts to effectively do their class work and research as well as participating in online courses with their own computers. Computers (stationary as well as laptops) are available on site for all adult education students to operate while completing their assignments.

In the future, we would like increase computer training for local businesses to help ensure employee retention and improve employee capabilities. This may require incorporating newer/updated versions of hardware and software. We would also like to increase our distance learning opportunities through the use of our Tandberg equipment whether for students needing additional credits, businesses conducting meetings/workshops, or for citizens searching for more enrichment. Other areas of interest to RSU 19 Adult Education include digital photography, graphic design layout, and other new technology as it progresses and becomes available.

#### 6. Strategies for Improving Academic Achievement and Teacher Effectiveness

RSU #19 endorses the technology standards for teachers and students as developed by the International Society for Technology Education. A full text of these standards can be found at the following links:

[www.iste.org/standards](http://www.iste.org/standards)

RSU #19 has used funds to incorporate technology throughout the curriculum where appropriate. Technology is the medium in which education operates in, therefore meaningful integration is an important aspect of our student's time here. The RSU #19 technological systems allow students to create, collaborate and produce work that emphasizes

student ownership while allowing teachers to effectively manage their projects. Technology is vital to how RSU #19 manages this system and creates potential for our students that would not be possible otherwise. In building their own body of work, students use technology seamlessly in the application of their own school work. In ongoing virtual collaboration with students, teachers themselves incorporate technology into their own work flow as a matter of course. The district encourages teachers to take advantage of the many professional development opportunities offered by MLTI. Working with in class support from teacher and tech leaders, teachers are shown examples and are encouraged to integrate technology at any appropriate opportunity.

7. Integration of Technology with Curricula, Instruction, and Assessment

We have an ongoing use of technology integration in our system. It takes many forms. The integration of some of the school wide initiatives looks like the following: District website, calendar, school and staff web sites, online services, web based collaborative projects, and paperless classrooms. It is our goal that the integration of technology is an integral and seamless part of instruction. Within the curricula, efforts to embed references to the ITSE Technology Standards, as well as Maine Learning Results will be ongoing.

Staff is encouraged to attend workshops and webinars to increase their level of proficiency. Our technology Integrator works with teachers to develop meaningful technology infused lessons that reflect best practices. We are still at the beginning stages of using our data collection to help drive our instruction. This will increase significantly in the next three years.

8. Technology Type and Costs, and Coordination with Funding Resources

<b>Goals</b>	<b>Activities</b>	<b>Hardware /Software</b>	<b>Costs</b>	<b>Funding Sources</b>
Provide and maintain student computers in Elementary Schools	Purchase computers, laptops, desktops, and tablets.	Hardware	\$700 per computer	Local funds



Upgrade wireless connections in elementary schools	Purchase and install wireless equipment	Hardware	\$20,000	E-Rate funds
Replace PreK-6 Teachers Laptops	Purchase equipment	Hardware	\$700 per computer	Local funds
Upgrade existing operating system.	and install software	Software	\$5,000	Local funds
Train teachers involved in the MLTI laptop program to successfully incorporate use of the laptops in the curriculum.	Workshops and in class support			State Funds
Continue to work toward placing projectors, media equipment in all classrooms	Purchase and install equipment	Hardware	\$8,000	Local funds
To increase technology staffing to support staff and students.	Workshops and in class support.		\$45,000	Local funds
Purchase 3-D printing equipment for Middle School IT program	Provide students with experience in 3-D modeling.	Hardware	\$10,000	Private Grant
Continue to acquire assistive technologies for students as determined by the District	Ongoing as needed	Hardware/ Software	\$200,000	Local funds and Federal funds

## 9. Supporting Resources

RSU #19 students and staff are using distance learning options, including the Tandberg equipment to access virtual classes in science, foreign language, and music. Students and teachers who use the MLTI HP ProBooks are learning to use a variety of programs and resources available through MLTI. The District subscribes to numerous online content provider services, including: Marvel!, Destiny, Opposing Viewpoints, PLATO, Global Issues Database, Gale's Science Resource Center, Google Apps for Education and included services, Edmodo, Kids Blog, Khan Academy, Tandberg Network. Additionally, the district provides professional memberships to ACTEM, Technology Engineering Educators Association of Maine, and Maine Math and Science Association.

Our students also take advantage of many of the free online education sites. These services are available to all students and staff from all school based computers, and also from home, through a secure link on the District's web site.

## 10. Steps to Increase Accessibility

Increasing student access to technology is a priority, to accomplish this the district will explore multiple mobile computing solutions such as, but not limited to, tablets, hand held devices, and other technologies as they are developed. We will maintain and expand wireless infrastructure to meet user needs and increase the use of web based services. Professional Development will ensure that teachers are well prepared to integrate technology effectively into curricula, instruction and classroom management. Source of funding: state, federal and private grants; local funds.

## 11. Promotion of Various Curricula and Teaching Strategies that Integrate Technology

We continue to shift our curricula to align with current research on best practices. This includes the use of technology within all classes at all levels and in all content areas. We have been identifying these strategies as part of the continual improvement cycle of teaching and learning. We use an Action Research Model of assessing student performance and making appropriate adjustments in practices based on the best results to date integrated with the Maine Learning Results. This model is supported in research and is reflected in our district results throughout the grade spans.

## 12. Professional Development

Personnel including teachers, principals, administrators, and school library media personnel will be provided staff development to further the effective use and demonstrate a sound understanding of technology operations and concepts. They will be supported in acquiring skills to demonstrate continual growth in technology knowledge and to stay abreast of current and emerging technologies.

They will be trained in the use technology resources to collect and analyze data, interpret results, and communicate findings to improve instructional practice and maximize student learning.

Teachers will be given resources to use technology to enhance their productivity, professional practice, and engage in ongoing professional development and lifelong learning.

They will use technological tools to support learner-centered strategies that address the diverse needs of students and apply technology to develop students' higher order skills and creativity.

Staff will learn to identify and locate technology resources and evaluate them for accuracy and suitability. They will plan for and implement the integration of technology resources within the context of learning activities and plan strategies to manage student learning in a technology-enhanced environment.

## 13. Innovative Delivery Strategies

Elementary Level: Staff at the elementary level play a more hands on role with the delivery of technology to students. They work in lab or station settings with students and integrate technology into their lessons where available and appropriate.

Middle Level: Through the MLTI program and additional resources for 5th and 6th grades, the current technological system allows innovative delivery of curriculum to students as a matter of course. The framework is virtual and available to students at any time. Integration of virtual systems into the daily class work means students do not need a separate place for their written work and technological work, but have them combined into one virtual environment that seamlessly allows students to work in both.

Teachers are part of the process that students use to manage, collect and ultimately present their work as appropriate.

Secondary Level: Nokomis Regional High staff have worked diligently at implementing daytime distance learning classes with other schools on the Tandberg System. The DOE has assisted with coordinating the various scheduling types in use by participating schools, but there are still some

discrepancies in the actual length of the school day and class periods. Nokomis continues its efforts to better coordinate scheduling to take advantage of the distance learning network of classes. The current system also embeds use of technology and delivery into the students daily work flow. The framework is virtual and available to students at all time. Integration of virtual systems into the daily class work means students do not need separate places for their work, but have them combined into a single virtual environment. Teachers are part of the process that students use to manage, collect and ultimately present their work as appropriate. Many students at Nokomis Regional High have taken or are taking online classes through Compass Learning, PLATO, the American School, Virtual High School, and our own in district online offerings.

Adult Education Level: Adult education is currently using PLATO online services to supplement its curriculum. The possibilities of online education are endless, where we could use this to meet all students' needs if a course is not offered locally or vice versa. Online services have also been utilized successfully by area businesses to conduct and/or attend statewide meetings without unnecessary travel.

#### 14. Accountability Measures

The following procedures will be implemented to insure accountability.

- Review the technology plan; identify progress and evaluate changes needed.
- Determine needs for in-servicing of teachers in the technology areas and develop appropriate content.
- Use assessment tools (self-evaluation, performance assessments) to gather data on student and staff use of technology.
- Provide leadership for professional development.
- Maintain current inventories and adjust as outlined in the plan.
- Provide leadership, support and technology integration, aligned with the Maine Learning Results and Common Core Standards.

## Three Year Plan for Implementation of Technology

<b>Goal</b>	<b>Person(s) Responsible</b>	<b>Time Frame</b>	<b>Evaluation</b>
Technology Integration	Director of Instruction Technology Director Technology Integrator	Ongoing	Classroom observations Teacher/Student evaluations
Instruction	Technology Director Technology Integrator Teacher Leaders	Ongoing	Surveys and evaluations provided by staff following professional development.
Online Learning	Principals Classroom teachers Technology Integrator	Ongoing	Tracking class and student enrollments through guidance at HS. Begin a detailed data collection system when using online lessons for interventions.
Equipment	Technology Director Principals	Ongoing	Inventory
Safety	Technology Department	Ongoing	Compliance with District policies
Community Involvement	Webmaster Adult Education Director	Ongoing	Documentation of all public relations work.