

# Byron Area Schools

## K-12 Technology Plan

### District Code 78020

312 West Maple Avenue  
Byron, Michigan 48418  
Phone 810-266-4881  
Fax 810-266-5723

URL: [www.byron.k12.mi.us](http://www.byron.k12.mi.us)

#### District Contact Person

**Mr. Roger Thelen, Supt. of Schools**

[thelen@byron.k12.mi.us](mailto:thelen@byron.k12.mi.us)

312 West Maple Avenue  
Byron, Michigan 48418  
Phone 810-266-4881  
Fax 810-266-5723

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#### Technology Director

**Steve Vowles, High School Principal**

[vowles@byron.k12.mi.us](mailto:vowles@byron.k12.mi.us)

312 West Maple Avenue  
Byron, Michigan 48418  
Phone 810-266-4620  
Fax 810-266-5723

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**Intermediate School District:**  
**Shiawassee Regional Education Service District**

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## **Introduction**

Students in the Byron Area Schools have had access to technology in their classrooms since 1996, while a computer lab was first installed in the high school in 1981. Since that first installation, technology has had a significant impact on the district's curriculum. As technology has changed, access to the Internet and other multimedia materials has become more available. There has also been an increased need for a comprehensive instructional change for all K-12 students, as well as, a systemic professional development plan for the instructional staff.

The district's initial Technology Plan was written by the district's Technology Committee to state guidelines in 1996. The Technology Committee has evolved as the improvement in technology has evolved. This committee and the new Technology Plan will help the district in technology purchases and curriculum integration. The Byron Area Schools recognizes that the Technology Plan must be a "living, breathing" document that changes as technology changes. The district also recognizes that all students and staff must have equal access to technology and equal opportunity to gain technology skills.

## **Byron Area Schools District Profile**

Byron Area Schools, covering eighty square miles, is situated in the southeast corner of Shiawassee County. This district is composed of one elementary school, one middle school and one high school. The district employs sixty four teachers, forty-six support staff and three administrators. Support for the K-12 programs is derived from local property taxes and state aid, using the formula developed by the state legislature, plus state and federal categorical assistance. There is little industry in the Byron Area School District, so residential and agricultural property taxes are the primary sources of local financial support.

## **District School Improvement Vision/Mission Statement**

The mission of the Byron Area Schools is to provide education for all by maximizing the talents of each individual. The Byron District has as its' goal to provide a safe learning environment, while encouraging the participation of the entire community. In addition, the District will strive to challenge all students to develop a positive attitude, enjoy life, and be a contributing member of society.

## **District Technology Vision/Mission Statement**

The Byron Area Schools is committed to preparing their students for the challenges of the twenty-first century. To help accomplish this, the district is continuing to strive to develop an ever-broadening technology rich environment.

This environment will enable Byron students to better accomplish the following:

1. Attain mastery in the use of grade level appropriate technology as it is infused into the curriculum.
2. Attain confidence and mastery with their ability to use the latest technology.
3. Imbed technology into all learning opportunities.
4. Be able to access, retrieve, and disaggregate worldwide information.
5. Transfer technology skills to the workplace environment.
6. Be able to use technology in a responsible and ethical manner.

### **District Technology Team Members**

<b><u>Name</u></b>	<b><u>Title/Roles</u></b>
Randy Markley	Board of Education President
Roger Thelen	Superintendent of Schools
Theresa Krejci	Curriculum Coordinator, Parent
Steve Vowles	Middle School Principal
Steve Vowles	High School Principal
Penny Kentish -McWilliams	Elementary Principal
Pam Richardson	District Media Specialist, Parent
Autumn McGuire	Elementary School Computer Tech., Parent
Patricia Sprague	Middle School Teacher, Parent
Brad Chrisinske	High School Teacher
Deborah Custack	High School Teacher
Tate Forbush	High School Teacher, Parent
Donald Wight	Parent
David Schulte	Director of Technology & Instructional Services, Shiawassee Regional Education Service District
Jackie Carstens	Network Technician, Shiawassee Regional Education Service District

### **Byron Schools School Improvement Goals**

All Students will reach proficiency or advanced in all core subject areas by 2013-2014  
Measurable Objectives:

1. To increase the rate of improvement of subgroups as measured on the MEAP.
2. To increase performance in writing across all grades as measured on the 2012-2013 MME/MEAP.
3. To increase performance in math across all grade levels as measured on the 2012- 2013 MEAP/MME.
4. Staff will continuously improve the learning organization as measured by CIC, questionnaire results, AYP and the MEAP/MME.

### **District Beliefs:**

- The proficient use of technology is a key to success.
- Curriculum and instruction drive classroom technology.
- Technology needs to be adequately and consistently funded.
- The ethical use of technology must be taught, as well as modeled.
- All students and staff should have the advantage of access to technology.

### **Major Technology Goals**

- Integrate the use of technology as a tool into the K-12 curriculum.
- District technology will meet curricular and instructional needs.
- Establish an on-going process for technology planning and acquisition that includes staff, students, parents, and the community.
- Establish a continuous support system for users of technology including appropriate training for all staff.
- Prepare students to use technology as a tool for lifelong learning in a democratic society.
- Establish adequate resources for all students and staff to become technologically literate.
- Develop a “curriculum map”, K-12, that aligns and integrates the entire technology curriculum.
- Continue with the present program to allow access to online and interactive educational options.
- Provide digital classrooms in grades K-12. This includes data projectors, laptops, cameras, touch screens, and all the wiring necessary to make these classrooms run effectively.

### **Goals For District Staff And Students**

- Teachers and students will demonstrate regular, effective use of technology in the classroom as a tool to create access, store, retrieve and manipulate information.
- Teachers and staff will use technology to expedite instructional, managerial and administrative tasks.
- Students will be prepared for occupational experiences in community partnership programs.
- Establish a network to disseminate professional development information.
- Make use of district resources such as school publications and the district website to keep the public informed of the status of present use and planned future use of technology resources.
- Comply with 20 hour On-Line Experience requirement.

### **Curriculum Integration Plan**

Current curriculum writing projects are underway K-12. The following goal will assist in the Integration of Technology in current and future curriculum:

- 2012-2015 – Develop and apply curriculum assessment tools to evaluate effectiveness.

The curriculum integration plan for the Byron Area Schools is based on the Michigan Technology Content Standards and Benchmarks, which are listed below.

### BASIC OPERATIONS AND CONCEPTS

*By the end of Grade 2 each student will:*

1. Understand that people use many types of technologies in their daily lives (e.g., computers, cameras, audio/video players, phones, televisions).
2. Identify common uses of technology found in daily life.
3. Recognize, name, and will be able to label the major hardware components in a computer system (e.g., computer, monitor, keyboard, mouse, and printer).
4. Identify the functions of the major hardware components in a computer system.
5. Discuss the basic care of computer hardware and various media types (e.g., CDs, flash drives, DVDs, videotapes).
6. Use various age-appropriate technologies for gathering information (e.g., dictionaries, encyclopedias, audio/video players, phones, web resources).
7. Use a variety of age-appropriate technologies for sharing information (e.g., drawing a picture, writing a story).
8. Recognize the functions of basic file menu commands (e.g., new, open, close, save, print).
9. Proofread and edit their writing using appropriate resources including dictionaries and a class developed checklist both individually and as a group.

*By the end of Grade 5 each student will:*

1. Discuss ways technology has changed life at school and at home.
2. Discuss ways technology has changed business and government over the years.
3. Recognize and discuss the need for security applications (e.g., virus detection, spam defense, popup blockers, firewalls) to help protect information and to keep the system functioning properly.
4. Know how to use basic input/output devices and other peripherals (e.g., scanners, digital cameras, video projectors).
5. Know proper keyboarding positions and touch-typing techniques.
6. Manage and maintain files on a hard drive or the network.
7. Demonstrate proper care in the use of hardware, software, peripherals, and storage media.
8. Know how to exchange files with other students using technology (e.g., e-mail attachments, network file sharing, flash drives).
9. Identify which types of software can be used most effectively for different types of data, for different information needs, or for conveying results to different audiences.
10. Identify search strategies for locating needed information on the internet.

11. Proofread and edit writing using appropriate resources (e.g., dictionary, spell check, grammar check, grammar references, and writing references) and grade level appropriate checklists both individually and in groups.

*By the end of Grade 8 each student will:*

1. Use proper keyboarding posture, finger positions, and touch-typing techniques to improve accuracy, speed, and general efficiency in operating a computer.
2. Use appropriate technology terminology.
3. Use a variety of technology tools (e.g., dictionary, thesaurus, grammar-checker, calculator) to maximize the accuracy of technology-produced products.
4. Understand that new technology tools can be developed to do what could not be done without the use of technology.
5. Describe strategies for identifying and preventing routine hardware and software problems that may occur during everyday technology use.
6. Identify changes in hardware and software systems over time and discuss how these changes affected various groups (e.g., individual users, education, government, and businesses).
7. Discuss common hardware and software difficulties and identify strategies for trouble-shooting and problem solving.
8. Identify characteristics that suggest that the computer system hardware or software might need to be upgraded.
9. Identify a variety of information storage devices (e.g., floppies, CDs, DVDs, flash drives, tapes) and provide a rationale for using a certain device for a specific purpose.
10. Identify technology resources that assist with various consumer-related activities (e.g., budgets, purchases, banking transactions, product descriptions).
11. Identify appropriate file formats for a variety of applications.
12. Use basic utility programs or built-in application functions to convert file formats.
13. Proofread and edit writing using appropriate resources (e.g., dictionary, spell check, grammar check, grammar references, and writing references) and grade level appropriate checklists both individually and in groups.

*By the end of the Grade 12 each student will:*

1. Identify a need and create or develop a new technology for the home.
2. Identify an emerging technology and forecast impacts of that technology on the family.
3. Participate in cooperative research and development projects which study consumer satisfaction of comparable products and services.
4. Participate in a real world context which uses a technological system for financial transfers.
5. Identify a social, civic or economic issue and propose a technological solution.
6. Evaluate present and future job markets in technology related fields.
7. Demonstrate the proper care of technological systems and components.

## SOCIAL, ETHICAL, AND HUMAN ISSUES

*By the end of Grade 2 each student will:*

1. Identify common uses of information and communication technologies.

2. Discuss advantages and disadvantages of using technology.
3. Recognize that using a password helps protect the privacy of information.
4. Discuss scenarios describing acceptable and unacceptable uses of age-appropriate technology (e.g., computers, phones, 911, internet, email) at home or at school.
5. Discuss the consequences of irresponsible uses of technology resources at home or at school.
6. Understand that technology is a tool to help complete a task.
7. Understand that technology is a source of information, learning, and entertainment.
8. Identify places in the community where one can access technology.

*By the end of Grade 5 each student will:*

1. Identify cultural and societal issues relating to technology.
2. Discuss how information and communication technology supports collaboration, productivity, and lifelong learning.
3. Discuss how various assistive technologies can benefit individuals with disabilities.
4. Discuss the accuracy, relevance, appropriateness, and bias of electronic information sources.
5. Discuss scenarios describing acceptable and unacceptable uses of technology (e.g., computers, digital cameras, cell phones, readers, wireless connectivity) and describe consequences of inappropriate use.
6. Discuss basic issues regarding appropriate and inappropriate uses of technology (e.g., copyright, privacy, file sharing, spam, viruses, and plagiarism) and related laws.
7. Use age-appropriate citing of sources for electronic reports.
8. Identify appropriate kinds of information that should be shared in public chat rooms.
9. Identify safety precautions that should be taken while on-line.
10. Explore various technology resources that could assist in pursuing personal goals.
11. Identify technology resources and describe how those resources improve the ability to communicate, increase productivity, or help achieve personal goals.

*By the end of Grade 8 each student will:*

1. Understand the potential risks and dangers associated with on-line communications.
2. Identify security issues related to e-commerce.
3. Discuss issues related to acceptable and responsible use of technology (e.g., privacy, security, copyright, plagiarism, spam, viruses, file-sharing).
4. Describe possible consequences and costs related to unethical use of information and communication technologies.
5. Discuss the societal impact of technology in the future.
6. Provide accurate citations when referencing information from outside sources in electronic reports.
7. Use technology to identify and explore various occupations or careers.
8. Discuss possible uses of technology (present and future) to support personal pursuits and lifelong learning.
9. Identify uses of technology to support communication with peers, family, or school personnel.



*By the end of the Grade 12 each student will:*

1. Use technologies to demonstrate skills and a systematic solution to a problem(s) (voice, data, video, graphics, etc).
2. Given a scenario, develop multiple options and present the solutions using a variety of technologies.
3. Retrieve, communicate, organize, evaluate, and manipulate information using a technological system (voice, data, video, graphics, etc).
4. Evaluate information received through technologies.

### TECHNOLOGY PRODUCTIVITY TOOLS

*By the end of Grade 2 each student will:*

1. Know how to use a variety of productivity software (e.g., word processors, drawing tools, presentation software) to convey ideas and illustrate concepts.
2. Be able to recognize the best type of productivity software to use for certain age-appropriate tasks (e.g., word processing, drawing, web browsing).
3. Be aware of how to work with others when using technology tools (e.g., word processors, drawing tools, presentation software) to convey ideas or illustrate simple concepts relating to a specified project.

*By the end of Grade 5 each student will:*

1. Know how to use menu options in applications to print, format, add multimedia features; open, save, manage files; and use various grammar tools (e.g., dictionary, thesaurus, spell-checker).
2. Know how to insert various objects (e.g., photos, graphics, sound, video) into word processing documents, presentations, or web documents.
3. Use a variety of technology tools and applications to promote creativity.
4. Understand that existing (and future) technologies are the result of human creativity.
5. Collaborate with classmates using a variety of technology tools to plan, organize, and create a group project.

*By the end of Grade 8 each student will:*

1. Apply common software features (e.g., thesaurus, formulas, charts, graphics, sounds) to enhance communication and to support creativity.
2. Use a variety of technology resources, including the internet, to increase learning and productivity.
3. Explore basic applications that promote creativity (e.g., graphics, presentation, photo-editing, programming, video-editing).
4. Use available utilities for editing pictures, images, or charts.
5. Use collaborative tools to design, develop, and enhance materials, publications, or presentations.

*By the end of the Grade 12 each student will:*

1. Apply technological procedures to overcome obstacles when implementing a solution to a problem.
2. Represent ideas using a combination of technologies aimed at reaching a diverse audience (voice, data, video, graphics, etc).

3. Evaluate decisions using technology.
4. Use technologies to organize thoughts in a logical process (voice, data, video, graphics, etc).

### TECHNOLOGY COMMUNICATIONS TOOLS

*By the end of Grade 2 each student will:*

1. Identify procedures for safely using basic telecommunication tools (e.g., e-mail, phones) with assistance from teachers, parents, or student partners.
2. Know how to use age-appropriate media (e.g., presentation software, newsletters, word processors) to communicate ideas to classmates, families, and others.
3. Know how to select media formats (e.g., text, graphics, photos, video), with assistance from teachers, parents, or student partners, to communicate and share ideas with classmates, families, and others.

*By the end of Grade 5 each student will:*

1. Use basic telecommunication tools (e.g., e-mail, WebQuests, IM, blogs, chat rooms, web conferencing) for collaborative projects with other students.
2. Use a variety of media and formats to create and edit products (e.g., presentations, newsletters, brochures, web pages) to communicate information and ideas to various audiences.
3. Identify how different forms of media and formats may be used to share similar information, depending on the intended audience (e.g., presentations for classmates, newsletters for parents).

*By the end of Grade 8 each student will:*

1. Use a variety of telecommunication tools (e.g., e-mail, discussion groups, IM, chat rooms, blogs, video-conferences, web conferences) or other online resources to collaborate interactively with peers, experts, and other audiences.
2. Create a project (e.g., presentation, web page, newsletter, information brochure) using a variety of media and formats (e.g., graphs, charts, audio, graphics, video) to present content information to an audience.

*By the end of the Grade 12 each student will:*

1. Design and construct technological systems that exhibit continuous improvement.
2. Creates working drawings from sketches to meet appropriate industrial standards.
3. Use measurements of dimension and capacity as criteria to produce and evaluate technological solutions to problems.
4. Transfer measurements within appropriate tolerances for the purposes of producing and evaluating technological solutions to problems.
5. Use industrial tools, materials, equipment, and processes to design and produce products addressing given technological problems.
6. Investigate, analyze, and assess potential safety hazards, establish guidelines for safe behavior, and adhere to common safety practices while around or participating in the technological solution to a problem.

7. Apply a systematic approach to design solutions to technological problems using investigation, analysis and idea development, proposals, planning, making a prototype of the solution, testing and evaluation of the prototype, and self assessment.
8. Adapt solutions to the needs and values of individuals, groups, society, and environment when designing/redesigning problem solutions and creating a quality end product to meet the need.
9. Analyze resources and processes to choose the best combination to create a technological solution to a problem.

### TECHNOLOGY RESEARCH TOOLS

*By the end of Grade 2 each student will:*

1. Know how to recognize the Web browser and associate it with accessing resources on the internet.
2. Use a variety of technology resources (e.g., CD-ROMs, DVDs, search engines, websites) to locate or collect information relating to a specific curricular topic with assistance from teachers, parents, or student partners.
3. Interpret simple information from existing age-appropriate electronic databases (e.g., dictionaries, encyclopedias, spreadsheets) with assistance from teachers, parents, or student partners.
4. Provide a rationale for choosing one type of technology over another for completing a specific task.

*By the end of Grade 5 each student will:*

1. Use Web search engines and built-in search functions of other various resources to locate information.
2. Describe basic guidelines for determining the validity of information accessed from various sources (e.g., web site, dictionary, on-line newspaper, CD-ROM).
3. Know how to independently use existing databases (e.g., library catalogs, electronic dictionaries, encyclopedias) to locate, sort, and interpret information on an assigned topic.
4. Perform simple queries on existing databases and report results on an assigned topic.
5. Identify appropriate technology tools and resources by evaluating the accuracy, appropriateness, and bias of the resource.
6. Compare and contrast the functions and capabilities of the word processor, database, and spreadsheet for gathering data, processing data, performing calculations, and reporting results.

*By the end of Grade 8 each student will:*

1. Use a variety of Web search engines to locate information.
2. Evaluate information from various online resources for accuracy, bias, appropriateness, and comprehensiveness.
3. Identify types of internet sites based on their domain names (e.g., edu, com, org, gov, au).
4. Know how to create and populate a database.
5. Perform queries on existing databases.
6. Know how to create and modify a simple database report.

7. Evaluate new technology tools and resources and determine the most appropriate tool to use for accomplishing a specific task.

*By the end of the Grade 12 each student will:*

1. Analyze and interpret the impacts of differing ethical and legal standards in the age of global competitiveness.
2. Explain the associated rights and responsibilities of applying for legal documents (e.g., patents, copyrights).
3. Establish an action plan to solve a technology related problem and assess the plan applying ethical and legal principles.
4. Analyze current and emerging issues (e.g., ethical, social, environmental, legal, political, privacy) related to technology.
5. Identify and evaluate solutions for solving the ethical problems associated with using tools, equipment, materials, and processes in a technological problem.
6. Understand and practice the concept of lifelong learning about technology within an ethical/legal context.
7. Analyze the extent to which organizational purposes and actions are compatible with personal standards in the effective and appropriate use of technology.

#### TECHNOLOGY PROBLEM-SOLVING AND DECISION-MAKING TOOLS

*By the end of Grade 2 each student will:*

1. Discuss how to use technology resources (e.g., dictionaries, encyclopedias, search engines, websites) to solve age-appropriate problems.
2. Identify ways that technology has been used to address real-world problems (personal or community).

*By the end of Grade 5 each student will:*

1. Use technology resources to access information that can assist in making informed decisions about everyday matters (e.g., which movie to see, which product to purchase).
2. Use information and communication technology tools (e.g., calculators, probes, videos, DVDs, educational software) to collect, organize, and evaluate information to assist with solving real-life problems (personal or community).

*By the end of Grade 8 each student will:*

1. Use database or spreadsheet information to make predictions, develop strategies, and evaluate decisions to assist with solving a basic problem.
2. Describe the information and communication technology tools to use for collecting information from different sources, analyze findings, and draw conclusions for addressing real-world problems.

*By the end of the Grade 12 each student will:*

1. Evaluate current uses of technology on one's personal career and occupational goals.
2. Analyze and forecast the effects of technology on one's personal career and occupational goals.

3. Evaluate the direct and indirect effects and impacts of technological developments on national and international issues.
4. Forecast the impact of technology on individuals in our future society, based on present trends.
5. Propose guidelines for appropriate and effective use of technology in our society as a whole or in a specific sector of society.
6. Formulate a position and support it about the roles of the government and private sector in creating and influencing policy concerning the use of technology.
7. Frame and support a position confirming that a technological application is safe and appropriate for individuals and society in general.
8. Identify and explain how environmental factors contribute to the development of technology and their impacts on society.
9. Assess the historical development of technology regarding the production of tools, equipment, and products in relationship to current societal and environmental needs.
10. Propose, research, and justify the introduction of new technologies.

### **Curriculum and Student Achievement**

Integration of technology will be completed by a number of methods. Computer labs are maintained at all grade levels. Media centers at the elementary and secondary buildings provide additional support for integration of technology through the use of both individual means, as well as, group applications. Specific integration of hardware and software is provided in course applications at both the elementary and secondary levels through technology instruction. Examples of these applications include:

- 1 - Elementary Computer Labs
- 1 - Middle School Lab
- 3 - High School Computer Labs
- 1 - High School CAD Lab
- 1 - Virtual Field Trip Station
- 74 - Teacher Computer Stations with E-mail and High-Speed Internet Accesses
- 74 - Video Streaming Agreements for Teacher Use

### **Curriculum through Technology Delivery**

Through this plan specific course work and educational instruction will be offered through distance learning by the following means:

- APEX On-Line
- Group Virtual Field Trips
- High School Business Course Applications
- Moodle Course Work
- Dual Enrollment Courses

### **Curriculum and Community Communications**

Community dissemination of the District's Technology Education Plan is completed through several means. The District Web Site, Newsletters, and Parent /Student Handbooks are currently used to inform the community members and parents. The Public Library also serves as a communication source as it shares technology resources with the district.

Parent and community communication access may be made through e-mail means, as well as, telephone communication. The current system contains fourteen (14) total phone lines and five (5) fax lines. The current system allows for expansion and all staff members have voicemail capabilities. The upgrade also allows for the addition of phones in the classrooms.

The district also has an on-line student information system that allows for teachers and parents to access student grades, attendance and other information through the internet. The Honeywell Instant Alert system provides a quick and simple means to message large groups of the district's communities.

### **Curriculum Collaboration**

This plan does not provide collaboration with adult literacy service providers. The Byron Area School's small community demographics have a slightly above average number of adults with a high school or higher educational level. This fact, coupled with the close proximity to other larger service providers, has reduced the need for those services.

### **Professional Development**

The Byron Area Schools supports a professional development program that encourages teachers to integrate technology into all areas of the curriculum. As an outcome of these activities, all staff will evaluate and utilize software and hardware for students to achieve the objectives of the district curriculum and develop lessons, which integrate technology into the curriculum. The members of the Technology Team may attend various technology-based conferences such as MACUL (Michigan Association of Computer Users in Learning) and they will also be encouraged to attend in-services/conferences where a focus is on the integration of technology to enhance instruction across the curriculum. In addition to these efforts, in-house training will be provided in the use of technology including, virtual field trips, software applications, video streaming, hardware applications and others.

## **Professional Development and Supporting Resources**

The Board of Education is committed to the effective use of technology to both enhance the quality of student learning and the efficiency of the schools. It also recognizes that safeguards have to be established to ensure that the Board's investment in both hardware and software is achieving the benefits of technology and inhibiting negative side effects. District Policies and Administrative Guidelines are in place to support the development and use of technology and professional development. Agreements and service contracts are in effect with the Shiawassee Regional Educational Service District as well as the Genesee Regional Educational Service Agency to provide direct and indirect support for technology and professional development. These resources include service contracts for hardware and software support, as well as, media and library lending agreements.

### **Professional Development Time-Line**

2012-2013

- District assessments and curriculum development
- Exam View Training
- iPad and Table professional development
- Annual update for
  - Online grading / calendar
  - Video Streaming
  - POWERSCHOOL (Student record system)
  - Aesop (Automated substitute teacher software)
  - Moodle
  - Honeywell Instant Alert Training

2013-2014

- District assessments and curriculum development
- Exam View Training
- Honeywell Instant Alert Training
- iPod Casts
- On-line Learning
- Annual update for
  - Online grading / calendar
  - Video Streaming
  - POWERSCHOOL (Student record system)
  - Aesop (Automated substitute teacher software)
  - Moodle
  - Honeywell Instant Alert Training

2014-2015

- District assessments and curriculum development
- Exam View Training
- Inservice Training For Digital Classrooms
- IPod Casts
- On-line Learning
- Annual update for
  - Online grading / calendar
  - Video Streaming
  - POWERSCHOOL (Student record system)
  - VIP (Automated substitute teacher software)
  - Moodle
  - Honeywell Instant Alert Training

### **Technical Support**

Maintaining the network and also the hardware and software in the Byron Area Schools is a constant challenge. Several avenues are being utilized to deal with this challenge. A service contract is in place between the Byron Area Schools and the SRESB to provide technical services to maintain operability of all components of the system. In addition, various staff members have received training to also assist in maintaining viability of the system.

### **Guidelines for Purchase and Maintenance of District Technology**

1. The Byron Area Schools will make every effort to maintain current instructional technology. In all buildings, computers will be replaced on a rotation cycle every 3-5 years, with the general principle that all will be repaired. This is to ensure that the technology needs of the district are met.
2. If maintenance or upgrading of the computer costs more than 50% of a new one, then it will be replaced with a new computer.
3. All equipment will be cleaned at least once per year. Equipment includes, but is not limited to the following: Computers, Monitors, Keyboards, Printers, Cameras, Fax, Copiers and Audio-Visual Equipment.
4. Equipment in high dust/dirt areas will be cleaned more often.
5. A maintenance/service log should be maintained for each piece of equipment.
6. Day-to-day maintenance priority will be as follows: servers and network backbone, media centers and computer labs, individual classroom machines.
7. Maintenance procedures and technical support will be evaluated yearly.
8. All future purchases will be compatible with the school's network and equipment.



## **Projected Timetable for Technology Plan Implementation**

### **2012-2013**

- Develop and apply curriculum assessment tool to evaluate effectiveness.
- Evaluate and update backup power system.
- Continue professional development for new and experienced teachers.
- Continue to implement, support and evaluate technology usage in the classroom.
- Continue evaluation of technology use in the curriculum.
- Continue to provide resources for technology integration.
- Evaluate future district technology needs.
- Develop new multi-year Technology Plan
- Implementation of Power School
- Implementation of Honeywell Instant Alert System
- Evaluate Elementary Schools technology needs

### **2013-2014**

- Develop and apply curriculum assessment tool to evaluate effectiveness.
- Evaluate and update backup power system.
- Continue professional development for new and experienced teachers.
- Continue to implement, support and evaluate technology usage in the classroom.
- Develop additional Middle School Computer Lab
- Continue evaluation of technology use in the curriculum.
- Continue to provide resources for technology integration.
- Continue development of Power School Systems
- Evaluate Honeywell Instant Alert System
- Evaluate future district technology needs.

### **2014-2015**

- Develop and apply curriculum assessment tool to evaluate effectiveness.
- Evaluate and update backup power system.
- Continue professional development for new and experienced teachers.
- Continue to implement, support and evaluate technology usage in the classroom.
- Continue evaluation of technology use in the curriculum.
- Continue to provide resources for technology integration.
- Continue development of Power School Systems
- Evaluate Honeywell Instant Alert System
- Evaluate future district technology needs.
- Evaluate District Communication needs.
- Develop new multi-year Technology Plan

**Technology Budget – Projected Costs** **(12-13-14)**

<u>New Equipment/Replacement:</u>	<u>Proposed Expenditures</u>
	2012 \$25,000
	2013 \$30,000
	2014 <u>\$20,000</u>
	Total \$75,000

<u>Software/Materials:</u>	<u>Proposed Expenditures</u>
	2012 \$15,000
	2013 \$10,000
	2014 <u>\$ 5,000</u>
	Total \$30,000

<u>Professional Development</u>	<u>Proposed Expenditures</u>
	2012 \$ 5,000
	2013 \$ 5,000
	2014 <u>\$ 5,000</u>
	Total \$15,000

<u>Contracted Services:</u>	<u>Proposed Expenditures</u>
	2012 \$30,000
	2013 \$30,000
	2014 <u>\$30,000</u>
	Total \$90,000

Total Three Year Projected Cost \$210,000

### **Funding and Budget for Technology**

<u>Technology Expenses Budget</u>	<u>2012-2013</u>	<u>2013-2014</u>	<u>2014-2015</u>
Elem. Computer/Software	1,500.00	2,000.00	2,000.00
MS Computer/Software	1,800.00	2,000.00	1,000.00
HS Computer/Software	5,400.00	5,000.00	2,000.00
Voc Ed Business Tech	4,500.00	4,000.00	2,000.00
Computer Tech	32,000.00	33,500.00	33,000.00
Voc Ed Drafting	2,700.00	2,000.00	4,000.00
HS / EL ED Servers			20,000.00
Computers District Wide			
Data Projectors/Laptops	20,000.00	20,000.00	20,000.00
SRES D-Base Service, Data Net & Instructional Main, Internet, MMR Microsage, MARS, and Internet Filtering	34,890.00	35,500.00	36,000.00
Media, Dynix, Tech Planning And Video Streaming	7,616.00	7,750.00	8,000.00
Automated Substitute Teacher Teacher Calling	3,174.00	3,200.00	3,300.00
Maintenance & Operational	<u>6,005.00</u>	<u>6,500.00</u>	<u>7,000.00</u>
Total	119,585.00	121,450.00	137,300.00

### **Coordination of Financial Resources Funding Plan**

The Byron Area Schools relies mostly on General Fund operating revenues to purchase and maintain technology needs. There are line items designated each year in the budget to address the goals established in the District Technology Plan. In addition, Universal Service Funds have been used for the purchase of Internet services and telephone services. Grant opportunities are also researched periodically to determine if additional funding sources are available. The SRES D also provides technology support as part of a consortium agreement involving all 9 educational entities in Shiawassee County.

### **Network Access Agreement for Students and Staff**

Staff designated by the Superintendent of Schools will train all students, teachers, and other staff in appropriate use of technology including all software and hardware approved for use in the District. A list of approved users will be maintained in each building office. Filtering of all sites/programs on the network is maintained by the SRES D by virtue of a consortium agreement between all nine (9) educational entities in Shiawassee County.

### **Current and Future Status of Technology**

Currently there are a total of five (5) computer labs in use in the Byron Area Schools. Three are located at the High School, and one each at the Middle School and Elementary School. In addition, the HS/MS Media Center has a lab for student use. There are also

over 100 additional CPU's, which have been placed in classrooms in all schools for student and staff use. In an attempt to provide updated hardware and software availability, a three-year cycle has been established where all computer labs will be updated at least every three years.

During 2011 three high school labs were upgraded and the computers taken from this lab will be rotated to other buildings. During 2012 all teacher workstations in the district were replaced with new units.

### **Evaluation Plan**

- The success of this plan will be demonstrated by the increasingly effective and efficient use of technology by both students and staff as they meet curricular needs and goals. The instructors will evaluate students' proficiency in technology as they continue to strive to integrate the technology into the curriculum. Staff use of technology will be evaluated by building administrators and the Technology Planning Team by assessing the level and frequency of use of technology in support of the educational program.
- As the Technology Plan is implemented during the next three years, the Technology Team will meet regularly to review the progress of the various goals and to evaluate the effects of the professional development activities both in the curriculum integration and the technology proficiency of staff and students.
- The Technology Planning Team and the Administration will conduct a formal annual evaluation of the technology program in the Byron Area Schools. The results of the findings of this evaluation will be presented formally to the Board for their information and review.
- A formal annual evaluation will be completed at the end of each year by the Technology Team and the Administration. The results will be presented to the Board of Education.

### **Technology Team Responsibilities**

The Technology Team is responsible for technology decisions and policies that affect the purchase and use of technology hardware and software for instruction throughout the district. It is the responsibility of curricular areas to ensure that any purchase of curricular software is compatible with existing district hardware. Individual members will inform the Technology Team of any major curricular purchases and/or grant applications for software or hardware from their building. There will be an annual spring meeting to review the status of proposed purchases and technology funds and proposed monthly meeting dates for the next year.

### **Network Access Agreement for Students and Staff**

All students, teachers, and other staff using the network/Internet will be trained by staff designated by the Superintendent in appropriate use. A list of approved users will be maintained in each building office.

To transfer free files, shareware, and other software from information services, electronic bulletin board services and e-mail, students must gain permission from the teacher. The teacher will direct the student or staff member in using the virus detection program. In order to use the Internet, a student must receive a pass from a teacher indicating the topic the student will be researching. The student will be allowed to research for that topic only.

Recreational use of the Internet is defined as searching for information that has to do with the student's personal interests and does not involve a class assignment. This will only be allowed when the computers are not being used for class assignments and permission has been given by the teacher in charge of the computers. The specific subject that is being searched for must be given to the teacher.

If damage is caused to the system or equipment that is suspected to be intentional, a report of the alleged violation will be forwarded to the principal. As part of the investigation, a trained technician may be consulted. The procedure will then be followed as outlined below.

Alleged violations of the Network Access Agreement will be handled in the following manner:

- A. A report of the alleged violation will be made in writing to the building principal. The alleged violation may be by a student or a staff member.
- B. The principal will investigate the alleged violation, make a judgment, and, if deemed a violation, take appropriate disciplinary actions.
- C. If the parents of the student or the staff member involved feel the incident was not a violation or disagree with the disciplinary action taken, an appeal can be filed within five (5) days of the judgment of the principal with the Superintendent.

Network/Internet agreements will be valid for one (1) school year. New agreements must be signed at the beginning of each school year.

### STUDENT NETWORK AND ACCEPTABLE USE AND SAFETY AGREEMENT

To access e-mail and/or the Internet at school, students under the age of eighteen (18) must obtain parent permission and must sign and return this form. Students eighteen (18) and over may sign their own forms.

**Use of the Internet is a privilege, not a right. The Board's Internet connection is provided for educational purposes only. Unauthorized and inappropriate use will result in a cancellation of this privilege.**

The Board has implemented technology protection measures which block/filter Internet access to visual displays that are obscene, child pornography or harmful to minors. The

Board also monitors online activity of students in an effort to restrict access to child pornography and other material that is obscene, objectionable, inappropriate and/or harmful to minors. Nevertheless, parents/guardians are advised that determined users may be able to gain access to information, communication and/or services on the Internet which the Board of Education has not authorized for educational purposes and/or which they and/or their parents/guardians may find inappropriate, offensive, objectionable or controversial. Parents/Guardians assume this risk by consenting to allow their students to participate in the use of the Internet. Students accessing the Internet through the school's computers assume personal responsibility and liability, both civil and criminal, for unauthorized or inappropriate use of the Internet.

The Board has the right to monitor, review and inspect any directories, files and/or messages residing on or sent using the Board's computers/networks. Messages relating to or in support of illegal activities will be reported to the appropriate authorities.

**Please complete the following information:**

Student User's Full Name (please print):

\_\_\_\_\_

School: \_\_\_\_\_ Grade: \_\_\_\_\_

Parent/Guardian's Name:

\_\_\_\_\_

**Parent/Guardian**

As the parent/guardian of this student, I have read the Student Network and Internet Acceptable Use and Safety Policy and Guidelines, and have discussed them with my child. I understand that student access to the Internet is designed for educational purposes and that the Board has taken available precautions to restrict and/or control student access to material on the Internet that is obscene, objectionable, inappropriate and/or harmful to minors. However, I recognize that it is impossible for the Board to restrict access to all objectionable and/or controversial materials that may be found on the Internet. I will not hold the Board (or any of its employees, administrators or officers) responsible for materials my child may acquire or come in contact with while on the Internet.

Additionally, I accept responsibility for communicating to my child guidance concerning his/her acceptable use of the Internet - i.e., setting and conveying standards for my daughter/son to follow when selecting, sharing and exploring information and resources on the Internet. I further understand that individuals and families may be liable for violations.

To the extent that proprietary rights in the design of a web site hosted on the Board's servers would vest in my child upon creation, I agree to assign those rights to the Board. Please check each that applies:

I give permission for my child to use and access the Internet at school and for the Board to issue an Internet/e-mail account to my child.

I give permission for my child's image (photograph) to be published online, provided only his/her first name is used.

I give permission for the Board to transmit "live" images of my child (as part of a group) over the Internet via a web cam.

I authorize and license the Board to post my child's class work on the Internet without infringing upon any copyright my child may own with respect to such class work. I understand only my child's first name will accompany such class work.

Parent/Guardian's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**Student**

I have read and agree to abide by the Student Network and Internet Acceptable Use and Safety Policy and Guidelines. I understand that any violation of the terms and conditions set forth in the Policy and Guidelines is inappropriate and may constitute a criminal offense. As a user of the Board's computers/network and the Internet, I agree to communicate over the Internet and the Network in an appropriate manner, honoring all relevant laws, restrictions and guidelines.

Student's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**Teachers and building principals are responsible for determining what is authorized or inappropriate use. The principal may deny, revoke or suspend access to the Network/Internet to individuals who violate the Board's Student Network and Internet Acceptable Use and Safety Policy and related Guidelines, and take such other disciplinary action as is appropriate pursuant to the Student Code of Conduct.**