Rhinebeck Central School District
Technology Plan
2014-2017

Rhinebeck Central School District
45 North Park Road
P.O. Box 351
Rhinebeck, New York 12572

Contact Person: Joseph Phelan, Superintendent of Schools
845-871-5520, ext. 5522; *Fax: 845-876-4276*
jphelan@rhinebeckcsd.org

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As a society we are living in auspicious times and our children are growing up with an unprecedented exposure to and experiences with technology in their everyday life. It is our responsibility to assure that the students who attend and ultimately graduate from Rhinebeck Central Schools are adept at using technology responsibly to enhance both their professional and personal lives. As ubiquitous technologies have expanded the classroom beyond the confines of our physical buildings, our technology planning must include visions and goals that stress critical thinking and collaborative technological literacy and include the interests of students, teachers, administrators, parents, staff, and community members.

I. Rhinebeck Central Schools – Mission, Vision, Core Values & Learner Outcomes *(from RCSD Comprehensive District Education Plan)*

MISSION STATEMENT
The Rhinebeck Central School District is an educational community that provides an excellent learning environment and is dedicated to the development of every student's generosity of spirit, passion for learning, and ultimate success.

VISION STATEMENT
The Rhinebeck Central School District meets the changing needs of our community with courageous programming consistent with State Standards and mindful of best learning practices. Each student enjoys an enriching experience while mastering the skills and knowledge to reach his or her maximum potential. We educate our students to become self-directed learners, complex thinkers, collaborative workers, quality producers, community contributors, and ethical decision-makers.

Core Values
Quality Education Includes:
- *Safety and Health:* Students and staff need a healthy and safe environment.
- *Resources:* A successful education program requires appropriate facilities, equipment, and materials
- *Respect:* We respect and honor the dignity and worth of ourselves, others, and our environment.
- *Responsibility:* Each person is responsible for what he or she says and does.
- *Courage:* Courage is required to grow, change, take risks, and make commitments.
- *Integrity:* Personal integrity develops as one attends to and becomes increasingly ethical in one's speech and actions. Adults model this process.
- *Whole Child:* In order for students to be successful, their emotional, social, physical, and academic needs must be met.

- *Collaboration:* The education of our students is a process involving the entire educational community: students, teachers, administrators, non-instructional staff, Board of Education, families, and the community at large.
- *Student Achievement:* Continuous growth and improvement occur when there is use of best practices, an articulated/ aligned curriculum and pertinent data.
- *Recognition:* Acknowledging and celebrating successes, large and small, nurtures growth and a sense of community.

District Life Long Learner Outcomes

The Board of Education adopted the following Desired Learner Outcomes (Policy # 0210.) Every graduate of the Rhinebeck Central School District will become:

SELF-DIRECTED LEARNERS, who use positive core values to create a positive vision for themselves and their future, set priorities, and achievable goals, create options for themselves, monitor and evaluate their progress, and assume responsibility for their actions.

COLLABORATIVE WORKERS, who use effective leadership and group skills to develop and manage interpersonal relationships within culturally and organizationally diverse settings.

COMPLEX THINKERS, who identify, access, integrate, and use available resources and information to reason, make decisions, and solve complex problems in a variety of contexts.

COMMUNITY CONTRIBUTORS, who contribute their time, energies, and talents to improving the welfare of others and the quality of life in their diverse communities.

QUALITY PRODUCERS, who create intellectual, artistic, practical, and physical products which reflect originality, high standards, and the use of appropriate advanced technologies.

ETHICAL DECISION MAKERS, who exemplify the principles of trustworthiness, respect, responsibility, integrity, fairness, caring and citizenship.

The RCSD Technology Plan is an integral part of the successful pursuit of these outcomes which drives every initiative in the Rhinebeck Central School District.

II. Introduction

Profile of the Rhinebeck Central School District

Rhinebeck is a suburban/rural community founded in the 1600's in the Hudson River Valley just 90 miles north of New York City. The community consists of about 65,000 square miles with a population

of about 11,000. Numerous cultural centers, colleges and universities (SUNY at New Paltz, Marist College, Vassar College, Bard College and Dutchess Community College) provide additional educational services and resources to students and community. Rhinebeck has all the advantages of a small town, endowed with cultural, historical, recreational, and human resources enriching the lives of those who live and visit this community.

The school district has about 1200 students enrolled in grades K-12 and there are currently 123 members of the teaching staff. There are three schools in the district, as well as the district office. The school district buildings are located on two campuses. The elementary school is located within a mile of the high school/middle school/district office campus. Rhinebeck Central Schools is located in an upper middle-class area of Dutchess County. The Free & Reduced Lunch rate is 9.17%. In 2007 Rhinebeck High School was recognized by Newsweek Magazines' "Challenge Index" as a nationally top ranked high school.

Background & Context of the District's Technology Plan

The Rhinebeck School District developed its first Technology Plan in 1994 in order to move the District through the 21st century. This Technology Plan has been revised and modified since then, with the goals of providing accessible technology, professional development to the staff, use of computer technologies to better deliver instruction & enhance student achievement, as well as to improve communication with district stakeholders.

The plan outlines a multi-year program of adding hardware and software to ensure multiple points of access from every classroom. The plan also details what every district student should know regarding technology. There is also a staff development section that outlines the district's plan to train all teachers in integrating technology into their classrooms, using multimedia to enhance grade level exhibitions, and to become skilled users of computer software and Internet applications.

III. Technology – Vision & Goals

Vision

The Information Age brings the challenge of preparing learners for the vast amount of information they will be utilizing in the coming years. Schools need to help all students to master basic skills and knowledge. They also must provide rich, creative experiences and opportunities to apply what they have learned in the classroom as well as in other settings. Their needs will be dictated by a rapidly changing society. Technology will be made available to all students in order to help them meet their educational objectives, including mastery of the New York State Learning Standards.

Schools will need information in timely, accurate, accessible, and usable forms. Teachers need to utilize a variety of instructional methods. Educators need to find new and better ways to accomplish this mission both efficiently and effectively. Most importantly, our students need the technological tools and resources to help them learn and achieve.

Planning for the future should be viewed as an on-going process, not simply as an event. It should focus on teaching and learning, should relate to instructional goals, and should be designed to equalize the opportunities for all students. Education should incorporate computers and courseware into daily classroom activities providing students the opportunity to work independently, in pairs, in small groups, or as a whole class. Technology encourages student exploration and discovery creating an active, student-centered environment where the child is responsible for his/her own learning.

Access to computer technologies allows students and staff to use research skills to obtain information on a universal basis. It will also enable various members of the school community to expand their ability to communicate with others including a world-wide audience.

In 2013 the RCSD Board of Education reaffirmed their commitment to technology stating;
"The Board of Education supports the Technology visioning statement as a guide to improving our K-12 Technology Program and as a means to support all our curricular goals." The Board also adopted **21st Century Teaching and Learning** as one of its goals. It states the following: *"The Board of Education is committed to the development of the District as a visionary model of 21st century teaching and learning. Through the CDEP process and its Vertical Teams, the Board supports the development and/or enhancement of curricula, support programs, and programmatic offerings that will prepare students for the challenges and opportunities of the 21st century. The Board also encourages the development and implementation of 'best practices' for the instructional delivery of 21st century curricula and programs, as well as the effective use of technology in communications and teaching methodology."*

Goals

The District plan is to maintain and improve on their technology program with the following broad goals:

- Integrate the use of technologies in all levels of instructional activities in the classroom
- Provide appropriate professional development opportunities to enable all teachers to effectively use technology to increase student achievement
- Ensure a robust and sustainable technology infrastructure

The goals for the years 2014 – 2017 will be:

A. CURRICULUM & INTSTRUCTION:
1. ***Students' Technology Abilities:*** Survey students' technology skills/abilities in grades 5-8. Use this data to articulate the district's computer technology curriculum to meet the district's 21st century goals, the NYS Computer Technology Standards (http://www.emsc.nysed.gov/cte/technology/standards/computer.html) and the National Educational Technology Standards for Students (NETS-S.) *– See Appendix B: The ISTE National Educational Technology Standards (NETS-S) and Performance Indicators for Students (http://www.iste.org/Content/NavigationMenu/NETS/ForStudents/2007Standards/Profiles/NETS_for_Students_2007_Profiles.htm)*

2. ***District Standards for Teachers:*** Develop district computer technology standards for teachers and administrators in conjunction with the ISTE National Standards for Teachers (NETS-T)

and Administrators (NETS-A.) - *See Appendix C: The ISTE National Educational Technology Standards (NETS-T) and Performance Indicators for Teachers (http://www.iste.org/Content/NavigationMenu/NETS/ForTeachers/2008Standards/NETS_T_Standards_Final.pdf & Appendix D: The ISTE National Educational Technology Standards (NETS-A) and Performance Indicators for Administrators (http://www.iste.org/Content/NavigationMenu/NETS/ForAdministrators/2009Standards/NETS-A_2009.pdf)*

3. *Acceptable Use Policies:* Review & revise the current Student Acceptable Use Policies in order to develop a uniform district-wide student policy. Additionally, develop a Faculty/Staff Acceptable Use Policy.

4. *CDEP:* Review the district's Comprehensive District Education Plan to determine any computer technologies that might support the initiatives set forth.

5. *Internet Safety:* Develop an articulated Internet Safety curriculum.

6. *NYS Technology Plan:* Assess alignment of the district's technology plan with six goals of the newly adopted New York State Board of Regents Statewide Learning Technology Plan.

7. *On-line Classes:* Investigate the merits of offering on-line elective courses at Rhinebeck High School. (CoSer 542.026, e-Learning)

8. *Expansion of High School Course Offerings:* Explore the feasibility of expanding the computer technology offerings in the high school to include courses such as Computer Aided Design (CAD), Architectural Drawing, Computer Programming, Video Game Design, A+ Certification, or other classes that would reflect current technology trends.

9. *District Computer Network Manual:* Develop a handbook that addresses the computer technology processes/procedures followed in the district to assist staff (e.g. how to put in for tech support, contacts for creating teacher web pages, etc.)

B. PROFESSIONAL DEVELOPMENT:

1. *Technology Integration Assistance:* Utilize technology integration staffing to assist in the professional development of staff members and enable the teaching staff to use technology more effectively in their classrooms.

2. *Technology Assessment of Staff:* Assess teachers' and administrators' technology skills to be used in planning meaningful professional development opportunities.

C. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT AND SOFTWARE:

1. *Interactive Whiteboards:* Continue to expand the use of interactive whiteboards in all schools based on instructional validity. Research into emerging technologies such as interactive projectors/screens will also be on-gong.

2. *Memory Upgrades:* Establish minimum standards for hardware memory.
3. *Improved Internet Connectivity:* Complete the review of the network evaluation conducted by SAGE computers regarding its effectiveness to provide the necessary broadband access to support technology-based educational initiatives and applications.

4. *Computer Technician Services:* Assess the need for increasing the technical support staff to ensure district equipment & applications are running at maximum efficiency and operability.

5. *Wireless:* Implement a enterprise level wireless system

6. *Software Installation:* Evaluate the efficacy of new operating systems and the latest version of productivity software for staff and students.

7. *Library Media Centers* Evaluate need for additional technologies in the libraries and the role of Media Centers and staff

8. *Parent Portal:* Open the parent portal for the district's grading system (SchoolTool.) for quarterly reports and grade cards and investigate increasing available functions of the portal.

9. *Cafeterias:* Install an alert system for food services and freezers to prevent loss of inventory.

10. *Cafeterias:* Improve the newly installed point-of-sale system to:

    a. Enable parents to better monitor their children(s) eating habits at school
    b. Eliminate the need for students to bring money to school
    c. Decrease the time it takes to serve the students
    d. Improve the accuracy of transactions

D. *Director of Technology:* The Director is responsible to:
   - Coordinate the K-12 technology instructional program to ensure its future growth and improvement
   - Work in consultation with the Director of Curriculum and Instruction to synchronize the Comprehensive District Education Plan (CDEP) and the district's Technology Plan
   - Coordinate and implement the recommendations of the CELT audit as appropriate
   - Initiate a comprehensive staff development program related to technology
   - Oversee improvements to the network infrastructure
   - Create long-range budget planning

IV. Curriculum and Instruction

The district's guiding document (RCSD Comprehensive District Education Plan) sets forth the action plans necessary to improve student academic achievement.

The district's student management software (SchoolTool) will be used to analyze student achievement data for the purposes of improving instruction as well as to revise the district curricula as needed.

The "Profiles for Technology Literate Students," the NYS Computer Technology Standards, the ISTE Crosswalk by Six Major Categories (a document integrating the NET-S with NYS Learning Standards, http://www.emsc.nysed.gov/technology/initiatives/Crosswalk_of_ISTE_NYS2.htm,) and the NYS Technology Plan will provide a framework for the district's ongoing computer technology curriculum. .

The district recognizes the value of integration support staff to assist teachers in their classrooms to ensure that technology is a meaningful part of instruction. To this end, the district will budget for appropriate professional development as it migrates to a mobile technology environment. They will use results of the teacher computer technology skills assessment as well to develop training sessions.

Across all grades K-12 computer integration is part of how the students learn and the teachers teach. In grades K-2 students have computer class once a week where they use software applications to reinforce math and ELA skills. A teacher aide assists the classroom teacher in managing the students' time in the lab. ~~In grades 3-5 students have computer lab once per week and this time is managed by a computer teacher who provides instruction on proper keyboarding skills and provides instruction in various computer skills. A majority of coursework done in this class is project-based and complements instruction/projects being done in the regular classroom.~~

Students receive computer-related instruction in grades 6-8. Sixth grade students are enrolled in "Introduction to Computers"; Seventh grade students are enrolled in the "Multimedia" course. Eighth grade students utilize technology in either the "Computer Applications" class or "Keyboarding" class. In addition, computer technology is integrated into classroom teaching units and activities. During the 7th grade year students participate in the JASON Project (BOCES CoSer 542.030) which is an inter-disciplinary curriculum that fuses science and technology. The goal of the K-8 computer curriculum is to prepare students to have the necessary skills to apply to their high school coursework.

In the high school there are currently four courses offered that incorporate computer technology:
1. Web Design
2. Digital Video Editing
3. Accounting
4. Computer Graphics

(Specific curricular and instructional goals as well at timelines to meet such goals are included in Appendix F.)

Two models define how we approach technology and it's integration into the curriculum to improve instruction

<mark>**SAMR and TPCK MODEL**</mark>
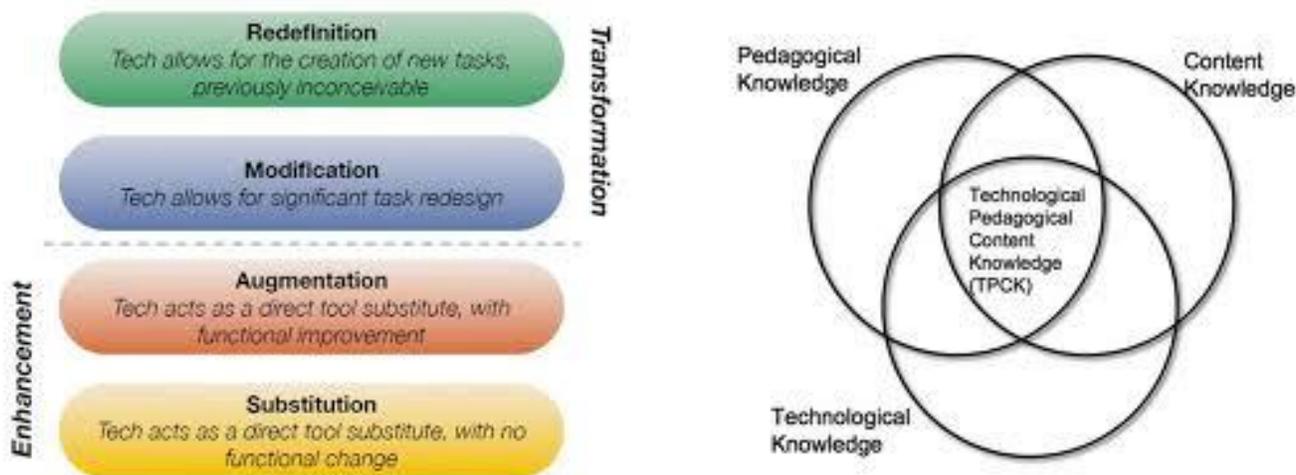
Parental Involvement & Communications

The Rhinebeck School District has a comprehensive shared decision-making process that includes all of our stakeholders. The Comprehensive District Education Plan (CDEP) Committee and the District Technology Committee are comprised of teachers, parents, and administrators. They meet to address the needs of students and staff. The Technology Plan is reviewed by these two committees. In particular the Technology Committee provides input for long-range computer technology ideas and assists in analyzing the future technological needs of the Rhinebeck Central School District.

The district maintains a website *(see Appendix G)* that allows parents, community members, students, teachers and others to access information about the district and its schools. The website includes individual teacher classroom pages, academic and sports calendars, newsletters, and important health office & guidance information. All district entities maintain a web presence including the District Office, the PTSO, and the Board of Education. On occasion survey tools are used to get input from parents, students, or community members. The website is an invaluable tool to broadcast emergency information (school closings/delays, health bulletins, etc.) to our parents and the community. The Technology Plan is posted on the website as an appendix to our CDEP plan.

Software application which have improved communications with parents is School Messenger. This automated messaging system employs both phone (verbal or text) and/or email communication to contact parents about early dismissals, emergency announcements, and calendar changes. Presently 60% of the parents have opted to be contacted via email. In emergency dismissal situations the district receives immediate reports indicating any phone numbers not reached. This enables each building to use an alternate method to contact the parent(s) to ensure that they can make plans for their children) returning home early. Additionally is employed to notify employees via phone & e-mail of emergency delays and closings.

V. Professional Development

The district Comprehensive District Education Plan (CDEP) 2009/2012 Goal #1 (*See Appendix E*) and the RCSD Technology Implementation Plan (*See Appendix F*) encompass the goals decided upon by the district stakeholders related to all curricular & technology initiatives. The following goals are addressed:

1. The District will annually administer the Professional Development Needs Assessment tool to determine faculty professional development needs. (CDEP Goal #1)

2. The District will provide professional development to identify and share internal best practice. (CDEP Goal #1)

3. The District will create a professional development library for all faculty and staff. (CDEP Goal #1) An automated form will be created and available on the district's website which will allow faculty to request materials.

4. The District will provide professional development that supports the infusion of technology into instructional planning and delivery across all disciplines. (CDEP Goal #1)

5. The District will conduct an evaluation of the current technology skills of the teachers and administrators and design a professional development plan complete with specific strategies to develop the skills and knowledge for teachers and administrators as articulated in the ISTE standards for teachers and administrators. (*Appendix F, #1*)

6. The District will identify and implement research based best practice strategies that utilize advanced technology to improve student achievement in all academic disciplines. (*Appendix F, #4*)

7. The District will devote a Superintendent's Conference Day for the purpose of exposing all administrators, teachers and support personnel to 21st century technology tools and provide specific outcomes based instruction regarding the effective and efficient utilization of those tools to align institutional practice with world class 21st century educational practice. (*Appendix F, #5*) Coordination of this activities offered will be done in conjunction with the services available through BOCES CoSer 542.010 (In-District Professional Development Day)

The district participates in a number of BOCES CoSers to assist in providing both professional development opportunities as well as a computerized system to track professional development hours as required for certification and/or other federal & state mandated trainings.

CoSer 542.000, Model Schools Program: "This service supports the effective and efficient integration of instructional technology into the teaching and learning process." Rhinebeck CSD

receives at least two days of in-district training as well as opportunities for on-line professional development for educators

The district employs an on-line professional development tool called *MyLearningPlan.com* to manage and track the professional development activities of all staff members. The data collected is used for various purposes:

i.   To track the NYS certification requirements for all teachers & teaching assistants who were certified since February 2004.

ii. To verify district compliance with mandated trainings (Blood-borne pathogens, Right-to-know, and Sexual Harassment)

iii. Funding support for this service is provided through BOCES CoSer 542.050
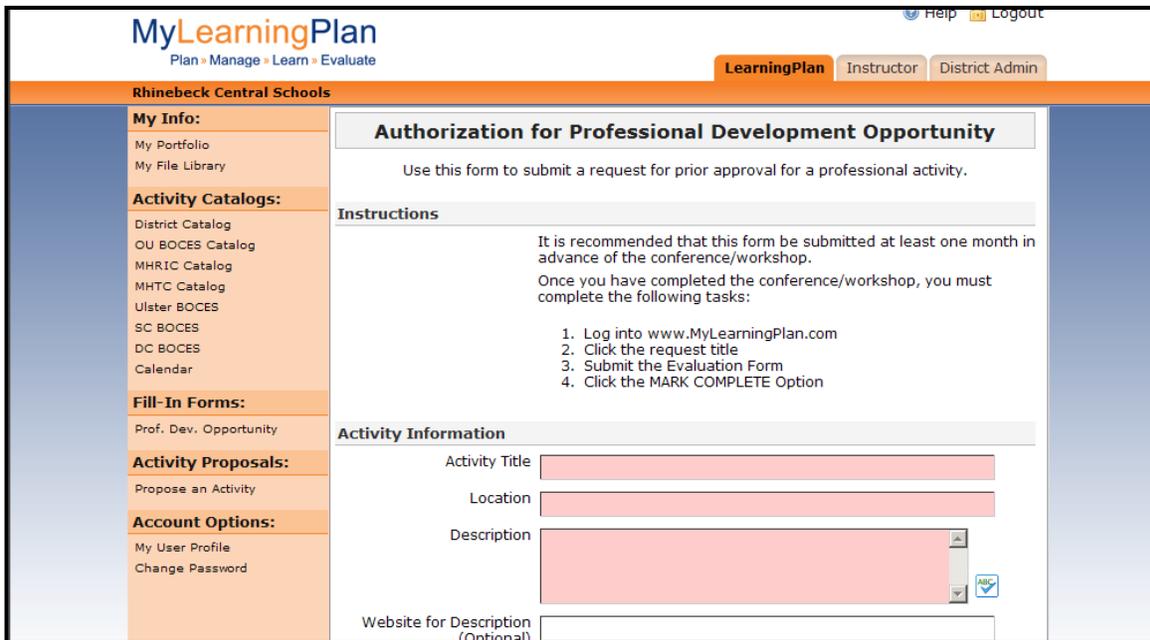
VI. Infrastructure, Hardware, Technical Support, Software and Telecommunications

Infrastructure

The district's computer network (LAN) is hard-wired with a new wireless system.

All servers are backed up nightly using the ComFault Backup System which is managed off-site by Computer Systems Integrators (CSI), Inc. CSI maintains an OM (On-Site Manager) server located in the HS/MS server closet. The network's integrity is managed both in-house by two technicians and the Director of Technology. With the installation of the Windows servers, there is redundancy between

the HS/MS campus and the Chancellor elementary campus. There are multiple wiring & server closets in the district's buildings:

- High school/Middle school – one server closet, two wiring closets
- Chancellor elementary school – one server closet, two wiring closets
- District Office – one server closet

Internet Connection(s): Internet connectivity from the district's LAN is at the Rhinebeck High School/Bulkeley Middle School campus.

Description of Internet Filtering: The district's internet filtering, as required by federal law under the Children's Internet Protection Act (CIPA), is centrally managed by our local BOCES using web content filter provided by a commercial product. Web sites which are of educational value, but are blocked by the filtering system, are individually evaluated for pass-through upon request by the Director of Technology in consultation with the appropriate District Administrator.

HVAC: The district's Operations & Maintenance Supervisor as well as Johnson Controls

Technical Support

The district technology department currently consists of three individuals, a Technology Director and a Microcomputer System Specialist and a desktop computer technician. The Director of Technology is responsible for:

- Overseeing the management of all technology-related equipment
- Make long-range plans for technology acquisition
- Coordinate the deployment of technology equipment
- Manage & monitor network accounts
- Manage the on-line technology-related request system
- Monitor student use of the network to assure compliance with the district's Acceptable Use Policies
- Meet with administration & staff as needed
- Work with the Director of Curriculum & Instruction to plan and coordinate technology related professional development activities
- Maintain an inventory of all computer-related technologies
- Coordinate technology repair & trouble-shooting needs with the computer technician
- Attend monthly Information Technology Services Advisory Committee (ITSAC), Curriculum, Assessment, and Instructional Technology (CAIT), ~~and SYSOP meetings.~~ Attend the Mid-Hudson Regional Information Center Technology Support Service (TSS) bi-annual meetings

The Microcomputer System Specialist is responsible for:

- Maintaining the integrity of the district servers
- Repair district technology equipment and/or arrange for repairs to be done by outside vendors as needed [BOCES Micro-computer Repair, CSI (Computer Systems Integrators, Inc.)]
- Installation & configuration of all software applications
- Roll-out new equipment & ensure operability with existing network
- Monitor back-ups and updates
- Troubleshoot technology issues
- Work with outside contractors on maintaining district technologies (e.g. Johnson Controls HVAC, Infomatic (staff database, payroll, taxes)
- Oversee & manage email archiving
- Maintain technology inventory
- Manage surplus equipment
- Attend monthly SYSOP meetings

Remote Backups & Network Alerts:
This district's daily server backups are managed and stored remotely through an agreement with Computer Systems Integrators (CSI), Inc. Additionally, both CSI and DC BOCES IT technicians remotely monitor the Rhinebeck LAN and issue alerts automatically to the computer department as needed. CSI maintains an OM (On-Site Manager) server in the HS/MS server closet

Requests for Technology Assistance: MySchoolBuilding is an on-line software application used to enable staff to submit work requests for a variety of needs (electrical, safety, courier, etc.) ~~Since Spring 2009 it has also been used for technological support and trouble-shooting. From January 2009 – March 2010 there were over 450 technology work requests processed.~~

CoSer Services: Participation in the following Dutchess County BOCES Learning Technology CoSers assists the district in maintaining a dependable internal and external infrastructure:

- <u>Lease Purchases</u> (CoSer 519.010) – The district finances the purchase of the majority of necessary IT equipment through a lease/purchase
- <u>Network Printer Maintenance</u> (CoSer 519.046) – The district uses this CoSer to cover the purchase of maintenance agreements on network printers
- <u>Email Archiving</u> (CoSer 519.048) – This CoSer enables to district to met the legal requirements for archiving our email system.
- <u>Cisco Certified Network Services</u> (CoSer 519.021) – Includes the services of Computer Systems Integrators, Inc. (CSI) which specializes in the design, configuration and implementation of local and wide area network (LAN/WAN) solutions
- <u>e-Learning Technology Support</u> (CoSer 519.026) - provides direct support to the Model Schools (CoSer 542.026) e-Learning service
- <u>Centralized Web Filtering</u> (CoSer 519.030) - provides the district with a centrally managed and individually customized web filter for safe and appropriate internet use by the students and the staff. Required for compliance with the Children's Internet Protection Act (CIPA.)

- ➢ <u>Centralized Internet Connectivity</u> (CoSer 519.031) – provides the district's high speed internet access
- ➢ <u>Antivirus Protection (E-trust)</u> (CoSer 519.043) – as a participant in the BOCES internet connectivity services, the district must protect network attached devices with valid anti-virus software. This is a very cost effective network-wide virus protection option.
- ➢ <u>Hardware/Software Maintenance Agreements</u> (CoSer 519.045) – enables the district to purchase maintenance agreements on servers and infrastructure devices purchased through BOCES. The district also receives direct support to manage network and software issues.
- ➢ <u>Microcomputer Repair Service</u> (CoSer 545.000) – provides the district with access to A+ trained and certified technicians who can provide hardware repair, upgrades, and preventive maintenance for computers, laptops, and peripheral equipment inclusive of external & internal devices for all manufacturer's equipment. Technicians are authorized IBM & Dell equipment warranty service providers. In addition, the district has access to the BOCES Help Desk.
- ➢ <u>High Speed LAN/WAN Access</u> (CoSer 619.045) – provides the district's LAN connections between the elementary school and the high school/middle school as well as internally within each building. Provides the district's WAN connectivity to the rest of Dutchess County and back to BOCES.

Software

Through the BOCES CoSer 519.015 (Hardware/Software Purchasing) the district is able to purchase instructional based software at standard State Contract prices.

Increasingly the district's new software applications are of the web-based variety. This decreases the need for storage use on individual machines. Additionally this frees the computer technician from frequent needs to ghost and adjust settings to accommodate new software. Web-based district software includes:

- ▪ MyLearningPlan
- ▪ SchoolTool
- ▪ MySchoolBuilding
- ▪ Outlook Web Access (OWA)
- ▪ School Messenger

CoSer Services: Participation in the following Dutchess County BOCES Telecommunication CoSers provides the district with a low cost solution to telecommunication services:

- ➢ <u>Telecommunications/E-rate Consortium</u> (CoSer 619.050) – covers line charges, Intellipath (four-digit dialing between school buildings), T-1 and high speed data transmission (broadband) for the Dutchess BOCES Wide Area Network (WAN). Provides the coordination of E-rate reimbursement filing and application with the Schools and Libraries

Division of the Universal Service Administrative Company for E-Rate discounts for eligible district telecommunications services. The district receives a discount on services based on the K-12 student population and percentage of students on Free and Reduced Lunch. Includes audits of system integrity and the filing of forms 470, 471, 472 and 486.

- **E-rate Consortium** (CoSer 619.060) – *See above for description of services provided to the district*
- **Substitute Calling Service** (CoSer 618.000) – provides for the automated substitute calling system (Aesop) via phone lines or the internet (www.aesoponline.com) which teachers use to request classroom coverage for an absence. Enables teachers to leave detailed plans, request particular subs, and monitor the job filling. The district has the ability to run reports such as teachers' absences, substitute fill rates, and statistics on activities by date. This service can be integrated with the district's mylearningplan.com.
- Administrative Fees (CoSer 619.002) – Covers the administrative fees associated with managing the Telecommunications. CoSer 619.

Library Services

The district maintains one library at the Chancellor Livingston Elementary School and a library media center at the Bulkeley Middle School/Rhinebeck High School. Both libraries use ~~Mandarin~~ Follett library management systems to maintain their card catalogs, circulation and collections inventory.

1. *Chancellor Livingston Elementary School*
    a. CURRENT DATABASE SUBSCRIPTIONS:
        1. *United Streaming*
        2. *Grolier Online Encyclopedia*
        3. ~~*SearchKid InfoBits*~~
        4. Trueflix e-book database grades 3-5
        5. Bookflix e-book database grades K-2
        6. *Worldbook Online Encyclopedia*
        7. *Britannica Online Encyclopedia*
        8. *Facts on File*
        9. *Brainpop*
        10. *EBSCO*
    Goals for Databases:
    - Increase the databases offered i.e Pebble to Go, Glogster
    - Encourage increased use of online databases
    - Provide training to the teachers to ensure the integration of safe, peer-reviewed materials for student research and study

2. *BMS/RHS Library Media Center*

a. CURRENT DATABASE SUBSCRIPTIONS - The following databases are accessible at school or at home. Passwords are provided to students for home access. Unlimited access is available for all student databases.

Library databases through Dutchess BOCES co-ser:
       Gale Student Resources in Context
       ProQuest Research Library
       Living Green Digital Library
       ABC-CLIO Modern Genocide
       CQ Researcher
       Science in Context
       Biography in Context
       U.S. History in Context
       World History in Context

Non-database resources through Dutchess BOCES co-ser.
       Brainpop (329 accounts for MS only)
       Discovery Education Streaming Basic (district wide subscription)
       Glogster (300 accounts for MS only)

Webspiration (MS only)

Gale Virtual Reference Library (Hosting fee plus individually purchased research and reference e-books)

Overdrive (district wide ebooks)

Other online resources:

NOVELNY databases (free from NYS Library)

Paid for by Dutchess School Library System
       NoodleTools
       Association for Supervision and Curriculum Development (ASCD) Collection
       Teaching Books.net

EVALUATION OF DATABASE RESOURCES (Both Libraries)

- Databases for potential purchase are previewed through free trials
- Database use is evaluated every year through usage statistics
- Projected projects and past use are most important factors in determining which databases to order. Also considered are reading level of database resources, ease of access and user-friendly design, cost, and comparison to other resources available.

A. GOALS FOR DATABASES:

- Expand database use and offerings at the elementary level to provide more at-home access for students completing research.
- Increase the number of e-books available to students for research purposes.
- Continue instruction on database use.
- Provide professional development on database use to faculty as requested.

IDENTIFIED NEEDS

- Additional computer access is needed.
- Some physical space in the library could be converted to accommodate additional computers. However, a better option logistically would be wireless access with laptops.
- Access to a computer lab or a portable laptop cart for teachers and students would provide the access needed.
- Improve technology integration and research skills at the elementary level

h. CURRICULUM AND INSTRUCTION GOALS

Three-year goals for the library media program include:

- Increase use of Web 2.0 applications in projects and lessons. For example, students will be taught how to use applications such as GoogleDocs, Delicious, Diigo, Wikis, Blogs, Nings, etc. for educational interaction and collaboration.
- Increase the use of multi-media resources in instruction, including online videos.
- Increase instruction in the evaluation of electronic information sources including web sites.
- Decrease use of paper through more online handouts, forms, etc.
- Increase student use of technology through the continued use of NoodleTools for citations.
- Increase the number of e-books purchased by the library for research purposes.
- Increase the number of databases used by students through outside sources. These would include databases subscribed to by the New York Public Library and Mid-Hudson Library System libraries.

Obstacles to meeting goals

- Internet filter currently limits the use of many web 2.0 applications and many other useful 21st century learning tools.
- Computers are limited and every student in a class may not have access.
- Comfort level of faculty may prevent full integration of new technologies.
- Current bandwidth severely limits the ability to watch streaming videos or use other multi-media applications.

VII. Funding and Budget

The budget for technology is formally adopted by the Board of Education each year. The proposed budget amounts (*See Appendix H: Proposed Technology Budget*) are subject to the approval of the Board and of the district voters. The expenditure of funds for technology is maximized by use of state aid for applicable purchases as well as successful awards of grant monies through Title I, Title IIA & Title IID sources, and by taking advantage of consortium prices available through Dutchess BOCES CoSers.

VIII. Monitoring and Evaluation

Policies

The Rhinebeck Board of Education's Policy #4526 (Use of Computers by Staff and Students) establishes the general principles, obligations, internet safety policy, monitoring of network accounts as well as due process and sanctions.

The Board is "committed to the optimization of student learning and teaching and therefore encourages the use of computers and networked resources, including the Internet (a global network made up of smaller contributing networks) by its students and staff. The District encourages computer use as an integral part of the curriculum. Through software applications, on-line data bases, bulletin boards and electronic mail, the network will enhance educational experience and provide statewide, national, and global communication opportunities for staff and students.

When a student or staff member accesses computers, computer networks, and educational technology owned or operated by the Rhinebeck Central School District (RCSD), or by the Dutchess County Board of Cooperative Educational Services (BOCES), he/she assumes certain responsibilities and obligations. All access to information of this type is subject to appropriate RCSD or BOCES policies and to local, state, federal, and international laws. RCSD expects that staff and student use of this technology will be ethical and will reflect academic honesty. Staff and students must demonstrate respect for intellectual property, ownership of data, system security mechanisms, and rights to privacy."

The district's technology support staff continually monitors the integrity of the network hardware, software, student accounts, and meets with administration periodically to discuss important issues and concerns. Additionally, all staff members are expected to monitor computer activity of students assigned to them to ensure student use of computers is in line with BOE policies. Students and parents are required to sign an Acceptable Use Policy each year before students are allowed access to their network account. *(See Appendices I-K)*

Program

Rhinebeck Central Schools consistently score above state and national levels on high stakes testing. Through the CDEP process, the district monitors the progress towards various educational goals and initiatives to evaluate the effectiveness of our efforts. Adjustments are then made after careful analysis by the CDEP team and its subcommittees (vertical teams) along with input from all stakeholder groups.

Specifically with regards to curricular and professional development technology goals, the district will use assessments to evaluate the effectiveness of the district's technology curriculum to meet the needs of the students. Subsequent assessments of staff technology skills will be used to determine the value of the professional development initiatives provided to the teachers & administrators.

Efficacy of the district's ability to maintain the operability of the technology infrastructure will be determined by reviewing the data available from the on-line work system, MySchoolBuilding.com, as well as input from other stakeholders including the CDEP Committee and the District Technology Committee.