2013-2016
TECHNOLOGY PLAN

Millbrook Central School District
PO Box AA
Millbrook, New York 12545
www.millbrookcsd.org

Contact: Diane Morey, Technology Director
V: 845.677.4216   F: 845.677.4206
diane.morey@millbrookcsd.org
Plan URL: www.millbrookcsd.org/technology

June 2013
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Millbrook Central School District Administration and Board of Education</td>
<td>4</td>
</tr>
<tr>
<td>District Technology Committee Members</td>
<td>5</td>
</tr>
<tr>
<td>Committee Tasks</td>
<td>5</td>
</tr>
<tr>
<td>Demographic Profile</td>
<td>6</td>
</tr>
<tr>
<td>District Mission Statement</td>
<td>7</td>
</tr>
<tr>
<td>Board of Education Technology Goals (2012-13)</td>
<td>7</td>
</tr>
<tr>
<td>Technology Vision Statement</td>
<td>8</td>
</tr>
<tr>
<td>A Look Back at 2010-2013</td>
<td>8-9</td>
</tr>
<tr>
<td>Instructional &amp; Support Plan</td>
<td>10-17</td>
</tr>
<tr>
<td>Budget/Funding</td>
<td>18-19</td>
</tr>
<tr>
<td>Summary of New Programs</td>
<td>20</td>
</tr>
<tr>
<td>Assessment of Current Resources</td>
<td>21</td>
</tr>
<tr>
<td>Plan Development</td>
<td>21</td>
</tr>
<tr>
<td>Supplemental Material:</td>
<td></td>
</tr>
<tr>
<td>K-12 Core Technology Skills for Students</td>
<td></td>
</tr>
<tr>
<td>Responsible Use Policy (RUP)</td>
<td></td>
</tr>
<tr>
<td>ISTE NETS for Students (revised 2007)</td>
<td></td>
</tr>
<tr>
<td>ISTE NETS for Teachers (revised 2008)</td>
<td></td>
</tr>
<tr>
<td>ISTE NETS for Administrators</td>
<td></td>
</tr>
<tr>
<td>AASL Information Literacy Standards for Students</td>
<td></td>
</tr>
</tbody>
</table>

---

June 2013
Millbrook Central School District

Administration

Philip D. D’Angelo, Superintendent of Schools
Dr. Christine Ackerman, Asst Superintendent for Curriculum & Pupil Personnel
Brian Fried, Business Administrator
Karen Fitzgerald, Elm Drive Elementary School Principal
Thomas Libka, Alden Place Elementary School Principal
Dr. Phyllis Amori, Millbrook Middle School Principal
Sandra Intrieri, Millbrook High School Principal
Julie Roberts, Millbrook High School Assistant Principal

Board of Education

Thomas M. Hurley, President
John Rudy, Vice President
Dawn Blackburn
Joseph Forte
Thomas Lehmkuhl
James Ross
Craig Wolff
**District Technology Committee Members**

Christine Ackerman, Assistant Superintendent  
Jeffrey Barnes, Teacher, High School/Middle School  
Valerie Brunow, Teacher, High School  
Jillian Cafarchio, Teacher, Middle School  
Philip D. D’Angelo, Superintendent of Schools  
Erin Hicks, Technology Integration Specialist, Grades K-5  
Thomas Libka, Principal, Alden Place Elementary School  
Diane Morey, Technology Director  
Cathie Morton, District Library Coordinator & Grades 6-12  
Library/Media Specialist  
Ashton Morris, Teacher, High School  
Michael Setaro, Teacher, Middle School  
Michelle Traudt, Teacher, High School  
Damian Whittaker, Teacher, Middle School  
Michael Williams, Teacher, High School

The committee was given these tasks:

1. Gather and analyze broad based data regarding the District's current technology problems, needs, and status, including an inventory.
2. Develop strategies and solutions that are necessary to address the District's needs and problems and to fulfill the District's technology mission.
3. Determine what hardware and software are best suited to implement the strategies and solutions.
4. Develop an implementation process which includes a cost analysis, a recommended series of steps or phases for implementation (including a time line), and a recommendation for the staff training that will be necessary.
5. Develop a means to measure the success of the plan.
6. Explore possible alternative methods of funding.
7. Present the long range technology plan to the Board of Education at a public meeting (June 3rd, 2013).
DEMOGRAPHIC PROFILE

The Millbrook Central School District is located in the geographical center of Dutchess County. It has an area of 80 square miles in a rural/suburban setting. The district is comprised of approximately 1200 students who are housed in four buildings: Elm Drive Elementary School, Grades K-2; Alden Place Elementary School, Grades 3-5; Millbrook Middle School, Grades 6-8; and Millbrook High School, Grades 9-12.

<table>
<thead>
<tr>
<th>District-Wide</th>
<th>Administrators</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>1,092</td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>Support Staff</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnic Statistics</th>
<th>Black</th>
<th>23</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian or Pacific Islander</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>967</td>
<td></td>
</tr>
<tr>
<td>Multiple Races</td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annual Budget for 2013-14</th>
<th>$27,189,135</th>
</tr>
</thead>
<tbody>
<tr>
<td>Millbrook High School</td>
<td>Students (Grade 9-12)</td>
</tr>
<tr>
<td>Millbrook Middle School</td>
<td>Students (Grade 6-8)</td>
</tr>
<tr>
<td>Alden Place Elementary</td>
<td>Students (Grade 3-5)</td>
</tr>
<tr>
<td>Elm Drive Elementary</td>
<td>Students (Grade K-2)</td>
</tr>
</tbody>
</table>
**District Mission Statement:**

“It is our mission to prepare our students to deal effectively with the challenge of an ever changing society, and to guide them in becoming humane critical thinkers, decision makers and problem solvers.”

**Board Of Education Technology Goals:**

1. **Emphasize the Culture of Learning**
   Continue to partner with faculty, staff, administrators, and parents to enhance the culture of learning whereby students are urged to continue to strive toward greater achievement and higher education goals.
   To achieve these purposes, the district will:
   - Promote school-based plans which develop a culture of both high expectations for individual learning and a personalized learning environment for students
   - Align K – 12 curriculum and correlate it to student achievement expectations/benchmarks
   - Review district programs resulting in annual recommendations for improvement, revision and/or elimination
   - Provide ongoing K – 12 Professional Development which develops staff capacity to collaborate effectively in meeting the accelerating challenge of improving student achievement in relation to state mandates.
   - Continue to evolve faculty integration of technology with staff training at each school.
   - Implement instructional intervention support systems
   - Support high school, middle level and elementary program development
   - Provide for ongoing and annual assessment of student achievement

2. **Board of Education Policy Review and Revision**
   Complete the comprehensive review and revision of the Board of Education policy manual in order to insure our district operates with efficacy and in compliance with state and federal regulations.

3. **Facilities Planning and Management**
   Demonstrate proactive facility management and effective use of both new and existing resources by working with our facilities professionals and Business Administrator to develop short and long term action plans that will improve the appearance, condition and functionality of our buildings, grounds and district wide infrastructure.
   To achieve these purposes, the district will:
   - Continue to develop technology infrastructure in order to support the Technology Plan.

4. **Fiscal Planning and Management**
   Develop plans and policies which will enable the district to be fiscally prudent while continuing to invest wisely toward achieving educational excellence.
   To achieve these purposes, the district will:
   - Seek alternate funding (grants) to augment support for program improvement and professional development
   - Investigate collaborative multi-district or inter-municipal service and purchasing programs and incorporate where prudent
   - Update the district’s comprehensive multi-year budget for K-12 technology systems
District Technology Vision Statement:

Provide every student with access to a full range of educational technology tools to develop higher-order thinking skills (problem solving, critical and creative thinking, decision making).

Identify, use, evaluate, and promote appropriate technologies to enhance and support instruction and standards-based curriculum leading to high levels of student achievement.

Create a culture that promotes the use of technology whereas the following instructional strategies are valued and implemented:

- Incorporation of real-life applications and career standards
- Encouragement of exploration and discovery learning methods
- Engagement of students in project-oriented, student-centered learning.

Provide on-going, technology-based, interactive learning opportunities for students, teachers, and administrators that can be accessed anytime and anywhere.

Encourage strategies for instructional delivery that routinely utilize available and emerging technology.

A Look Back at 2010-2013

The Millbrook Central School District has implemented the following technological enhancements and changes during the past three years:

- A multi-year plan is underway that will significantly enhance our K-12 academic program. New Apple computer labs were purchased to support our Art and general education programs. Mobile Macbook labs are being phased in for use by students in grades 7-12 Social Studies and ELA classes.
- Project Lead The Way (PLTW) program offerings were expanded to include a high school Biomedical Science elective.
- As part of the ongoing 5 year replacement program, teaching staff will be fully transitioned to using Macbook laptops provided by the District.
- iPad carts were purchased with grant funding for Elm Drive, Alden Place, and the Middle School to support our special education students as well as our academic intervention programs.
- Technology integration support for teachers has shifted from a model where 1.4 FTE staff were dedicated to working with teachers individually, to a new model that includes our teachers leading after school professional development, and having one teacher at each grade level who is available to their peers to answer questions.
- Data driven decision making, along with NYS testing requirements were supported through the use of BARS, Scholastic SRI, and Acuity software.

8
June 2013
• Major changes were made to the District acceptable use policy for computer equipment and Internet use. Website filtering is now extremely minimal, and the policy focus is now on responsible use by students and staff. Education and review of the new policy was completed in October.
• We have converted the Follett/Destiny library software used at all four libraries for automated circulation of materials to an open source package called OPALS.
• The student management system was converted from SASI to Schooltool.
• Elm Drive and Alden Place have switched to an online elementary report card, an optional feature of the Schooltool program.
• Online access for parents has expanded - the Schooltool Parent Portal offers grades, attendance, scheduling, and contact information, the Atlas parent view provides curriculum maps, and the Lunch Prepay feature of our Meals Plus program allows parents to prepay and monitor their child’s cafeteria purchases.

Improvements to infrastructure have provided for the support and expansion of program goals:
• New Apple servers were purchased and set up to support our dual platform instructional goals.
• A Virtual Server system was purchased to support server upgrades and new servers at a lower cost per unit and with built-in hardware redundancy to minimize down time.
• Wireless capacity was increased to accommodate new mobile labs.
• The District was converted from two separate phone systems to one VoIP (Voice over IP) phone system.
• The Food Service department went from paper to a computer system called Meals Plus, which tracks school lunch purchases and inventory.
• An automated work order system called SchoolDude was put in place by the Maintenance department for improved tracking and reporting of work orders.
• Separate HVAC software systems were upgraded for centralized district access.
• District staff who have leadership roles will participate in and create opportunities for all students and staff to increase the understanding of technology necessary for life-long learning and success.
  o Review and adopt ISTE NETS for teachers and administrators.
  o Teachers will present successful uses of technology to grade level or building groups of their colleagues, in order to encourage and expand the use of these applications.

• Integrate technology at all levels (K-12) in support of NYS Common Core Standards, and ISTE National Standards.
  o Students will engage in teacher facilitated, technology-dependent learning that is project-based, using open-ended questions and higher order thinking skills.
  o Faculty will complete curriculum mapping for all subject areas and grade levels, including a review of maps for vertical correlation with grade levels above and below.
  o Review and re-align curriculum to the NYS common core standards.
  o Document core technology skills for grades K-12 using curriculum mapping software.
  o Create benchmarks/projects that will demonstrate students understanding of core technology skills integrated with classroom curriculum.
  o Make a lesson plan repository available to all teachers.

• Encourage strategies for instructional delivery that make use of emerging technology and 21st Century learning skills.
  o Teachers will encourage students to select from a variety of technology tools to organize and to summarize material.
  o Students will select appropriate tools and electronic devices to gather, organize, analyze, and present information.
  o Students will communicate ideas through a variety of media and Web 2.0 tools, including video, images, and collaboration tools (blogs, bookmark sharing, video sharing).
  o Expand the use of interactive and collaborative software (online courses, wikis, video chat) as an opportunity for teachers to engage with students.
  o Evaluate the “Flipped Classroom” approach: Expand capabilities for providing audio/video files as a tool for instruction (podcasts, video capture of class lessons/lectures, subscription video libraries).
  o Develop electronic student portfolios to organize/display/archive student work.
  o Encourage reading and publishing skills using tools like Shelfari, a virtual bookshelf where students can read books, publish summaries, assign ratings, give reviews, and share recommendations.
• Utilize technology resources to differentiate instruction (i.e., to provide students with the appropriate remediation and/or enrichment to achieve individual academic excellence).
  o Select and use appropriate software for staff to manage and monitor progress of students receiving AIS services and other remediation programs.
  o Select and use appropriate software for student enrichment programs.
  o Purchase assistive technology devices as needed to comply with individualized education program (IEP) requirements.

• Actively seek out and implement technology based instructional programs that enrich learning experiences.
  o Continue and expand Project Lead The Way (PLTW) Program.
  o Keyboarding instruction beginning at grades 3-5
  o Core/Basic Technology Skills instruction for grades K-5
  o Evaluate and purchase appropriate tools to incorporate video production & broadcasting into student instruction.
  o Information Literacy classes at appropriate grade levels, to instruct students on evaluation of electronic resources and selection of appropriate resources to solve authentic problems.
  o “SWAT” (Students Who Assist w/Technology) teams of student leaders at each building:
    o Middle & High School students helping younger students
    o School Webpage Designers
    o TV/Weather Internet News Crew
    o Anti-Cyber Bullying
Communications

• Improve communication between the District and our community to enhance the community’s knowledge of our programs.
  o Use the district website to allow teachers and administrators to build relationships with community members.
  o Conduct surveys and polls to solicit community feedback.
  o Offer parents the opportunity to access web-based information about their children’s learning environment, climate, and outcomes, as well as a wide range of student activities that can help them to monitor and reinforce the instruction their child receives at school.
  o Create website links for video on demand viewing of public presentations (speakers, concerts, plays, Board of Education meetings).
  o Post all District printed materials (publications, presentations, letters to parents or community members) on the website.
  o Upgrade AlertNow phone notification system to include email and text messages to parents.
  o Expand information posted by teachers in the Schooltool Parent Portal.
  o Explore feasibility of purchasing intercom systems that are integrated with our phone system as the old systems are phased out.
  o Publish our district newsletter in-house, using podcasting, RSS feeds, video stream weekly news from administrators.
  o Share district events, awards presented to students and staff, and other accomplishments with community members using the district website.

Electronic Resources

• Increase the use of technology tools and digital content that allows learning to take place anytime, anywhere.
  o Expand video conferencing and virtual field trip program offerings.
  o Investigate a multimedia management system to replace our current separate systems (Ensemble video, videoconference bridge, & Adobe Connect)
  o Increase virtual/online learning opportunities for students.
  o Provide remote access to district resources for students and parents (full text encyclopedia/print media subscription databases, education based search engines).
  o Purchase online or digital textbooks whenever possible. Beginning in 2014, purchase for 8th and 10th grade courses.
  o Add e-books and readers to district library materials and services.
• Elm Drive Elementary School students periodically visit the Millbrook Free Library (MFL), ranging anywhere from four visits per school year to monthly visits. The children’s librarian does a literature-based program with the students, and students are then allowed to check out books.
• Middle School and High School Book Clubs receive their monthly selections through collaboration with the library staff and children’s librarian.
• Public and school librarians exchange information concerning programming. They also work together to promote New York State’s annual summer reading program.
• Access to the Millbrook Central School District’s library automation system is available from any computer with an Internet browser, including those at the Millbrook Free Library.
• The Millbrook Free Library is an MCSD courier stop, allowing for the inter-library loan of materials between the school district and public library.
• Our district participates in the Millbrook Literature Festival that takes place annually in May.

The District, in compliance with Children’s Internet Protection Act, strives to create a safe learning environment for all students in accordance with the following:
• Use of an Internet filtering system to block and filter Internet access by minors to inappropriate content.
• Providing instruction for students on safety and security measures to follow when using electronic mail, chat rooms, social media, and other forms of direct electronic communications
• Strategies to prevent unauthorized disclosure, use, and dissemination of personal information
• Monitoring of unauthorized access, including so-called “hacking”, and other unlawful activities by minors online.
• Creating or adopting Internet Safety Programs for students and parents.
• Sponsor Computer Use and Internet Safety programs during school, and offered to the community as needed.
State & Federal Requirements

- Track Professional Development hours using myLearningPlan software
- Expand use of Finance Manager for required staff APPR data reporting
- Provide technical support for use of the NYSED Parent Portal, availability date to be announced
- Support faculty use of the NYS TEACH system
- Teacher verification of Student/Course data (“TSDL”), possibly using period attendance reporting for K-5 to auto-compute minutes of attendance
- Digital-immediate feedback (instead of Evaluation Strategies)
- Introduce tools that will help our students prepare for the online PARCC assessments
- Student Assessments:
  - PARCC online, grades 3-12 beginning in September 2015
  - Benchmark local assessments for determining growth scores

Professional Development

- Support and expand professional development for teachers by providing training that satisfies a range of technological competencies, and by the use of a wide variety of delivery methods.
  - Professional Development will be provided through in-service courses and through participation in the BOCES Model Schools CoSer.
  - Create additional programs and materials for faculty and staff training (before and/or after school, summer sessions).
  - Provide mentoring opportunities during the day for teachers with high level technology skills to assist classroom teachers who want to use technology that is new to them. Faculty will offer introductory and intermediate knowledge in areas where they have developed expertise that will support the use of both hardware and software technology tools.
  - Set up inter-building videoconference meetings to facilitate collaborative instructional projects that may involve a mentoring component.
  - Introduce 2008 (revised) ISTE NETS for teachers and administrators.
  - Provide opportunities to bring in experts for higher level training.
  - Include technology integration component in annual evaluation for teachers.
• **Enhance the efficiency and effective use of administrative software (scheduling, grades, attendance, financial, Special Education, etc.).**
  o Update Finance Manager software, and expand the use to include staff who are responsible for budgeting and account balances.
  o Software will be integrated, or processes created for transfer of data between systems whenever possible.
  o Move to a “single sign on” where possible, for staff to access all of their password protected systems.
  o Computer orientation process for long term substitute teachers.
  o Administrators will use management software to cull information for completion of state and federally mandated reports (e.g., BEDS, VADIR, Civil Rights Surveys) and any other report requiring demographic or assessment data.
  o Staff will use a standard set of software tools for efficient sharing of information (e-mail, calendar, resource scheduler, word processing, spreadsheet, e-mail archive).
  o Periodic review and update of district procedures and policies in order to maintain compliance with state/federal reporting and data retention requirements.
  o Review and revise *Responsible Use Policies* for student and staff use of computer equipment and the Internet.

• **Provide technology tools for ensuring the safety of our students and staff.**
  o Digital attendance records and bus rosters for use with fire drills, evacuation drills, and in the event of real emergencies.
  o Safety/emergency related text message alerts for staff and parents.
  o Upgrade security camera system- add exterior/interior cameras, update system for higher quality video.
  o Improve administrator access to security camera video using web enabled software access.
  o Add key fob (only) access on common entrances for all district buildings. Expand key fob access as needed to allow staff to implement evacuation drills to alternate buildings.
  o Use the *SchoolDude* work order system to report, track, and manage health and safety issues handled by our maintenance staff.
  o Internet Safety Curriculum for all students in grades K-12.
Establish standards for hardware, software, and required technology skills (for students, teachers, administrators) as appropriate for district, building, and grade/department levels:

- Evaluate current hardware distribution and recommend purchases as needed to maintain equity and to ensure that planned program expansion will take place.
- Implement a 5-8 year replacement plan for all desktop and laptop computers.
- Make broad software recommendations and purchases based on curriculum requirements by grade level, building, and/or department, after identifying areas of need (including general purpose, remediation, enrichment, independent study).
- Purchase site licenses for reviewed/approved software when possible, to reduce installation and maintenance costs, and to ensure access for all students.

Monitor and upgrade network infrastructure, and ensure adequate levels of technical support as the demand increases.

- Respond to network growth needs with increased capacity (Internet bandwidth, internal network speeds including wireless and wired, video streaming requirements)
- Survey all rooms to make sure there is adequate power for using computer equipment and all other required electronic devices.
- Monitor and maintain hardware infrastructure (servers, switches, routers, and management devices) to provide adequate access to the network.
- Identify ways to increase technical support staffing levels in order to decrease down time of equipment, reduce wait time for teachers, and maximize use of the computer labs, libraries, and specialized equipment.
- Periodically upgrade server and workstation operating systems, security software, and other tools (MS-Office, anti-virus, plugins—Flash, QuickTime, Media Player, etc.) as needed to maintain a properly functioning infrastructure.
- Install and use software that will allow computer technicians to provide remote support (VNC, Windows RDP, Zenworks, Apple Remote Desktop), in order to reduce the manpower needed to support existing hardware and software.
- Purchase and install security devices (internal/external cameras, building code/card access systems).
• Provide equitable access to, and distribution of, appropriate technology for the entire school district and community.
  o Promote the installation and use of open source software.
  o Pilot a one to one program (a laptop for each student), 7th grade
  o Mobile technology use (smart phones, tablets)
  o Open computer labs/libraries for student use after school until 5pm. Students can do homework and access online textbooks.
  o Research equipment discount programs available to parents and staff.
  o Provide continuing education for parents (Parent University). Sample topics might include: Internet Safety, Avoiding Internet/Email Scams, basic word processing and spreadsheet skills.

Community Outreach

  o Evening Computer Courses for Senior Citizens: e-Books, Social Media, including video chats with family members, Online Shopping & Online Finance, Travel Planning, Health/Diet and other Internet research topics.
  o Have students research/interview business owners in the Millbrook community and publish video documentaries.
  o Students and staff showcase technology in community areas and events like Parade of Lights, Merritt Bookstore Art Show, etc.

Evaluation Strategies

• Provide assessment tools that will give teachers and administrators the ability to use data to make decisions that will improve teaching and learning.
  o All students will be given a Technology Proficiency Assessment during their 8th grade year, based on the ISTE NETS Standards for students.
  o The district will make data/statistics available to teachers and administrators for use in assessing/revising programs, disaggregated by building, grade level, course, teacher, and/or student as needed.
Hardware:

The following budget is based on available funds in the BOCES lease code each year, and does not necessarily represent the total cost requirements of all of the desired and proposed new program purchases, replacement equipment, and infrastructure maintenance. Supplemental funds are considered annually to support the total desired and proposed plan on an as needed basis.

Infrastructure upgrades are often a large initial expense, and for that reason are strategically planned for a particular school year. Program purchases are deferred to the following year in order to maintain a level budget amount.

Replacement computers are purchased with available funds after program and infrastructure needs are met, because the first two are needed in order to support the computers. Historically, it has not been possible within existing budgets to replace units after 5 years and still fund new programs, so we have deferred replacement of some units in order to balance these needs. We are reviewing our total computer inventory, and along with making recommendations for an anticipated life span (somewhere between 5-8 years), we will be able to establish an actual cost for replacement of computers required for instruction and administrative areas.

2013-14: $106,000
  12th grade Mac laptop cart - $35,000
  9th grade Mac laptop cart - $35,000
  MMS Library laptop cart - $10,000
  District replacement computers - $26,000

2014-15: $96,000
  Alden Library Mac laptop cart - $35,000
  MMS 6th grade Mac laptop cart - $35,000
  Replacement computers for Elm Classrooms - $26,000 (Windows)

2015-16: $88,000
  District wireless infrastructure upgrade - $60,000
  District wiring closet switch upgrades - $10,000
  District replacement computers - $18,000

2016-17: $120,000
  7th grade 1:1 laptop program - $1,200 per student, appr. 100 students

The District will participate in various BOCES CoSers. Membership in these CoSers allows for technology purchases in the area of infrastructure, hardware, software and staff development, with state aid reimbursement.

The District will continue to assess the option of hardware expenditures that would be eligible for partial reimbursement through NYS aid to public schools.
**Software:**

**STATE BUDGET = $21,000**
This amount is reimbursed fully each year by NYS aid. The aidable amount was reduced from $28,000 due to the closing of St. Joseph’s school. These funds will support annual subscription fees for:
- Groupwise email, OPALS Library Automation, Tenmarks Math,
- learning.com for Keyboarding, PARCC preparation, K-5 basic technology skills,
- iTunes apps, Backup software, and MS-Office/iWork suites

**MILLBROOK BUDGET=$62,350**
This additional amount is included in the General Fund budget, paid through a BOCES CoSer for BOCES aid where possible, and covers annual fees for:
- HS/MS: $5,750- Project Lead The Way, $4,000- Naviance, $15,000- Novanet,
- Testing: $18,565- Acuity, $7,125- Scholastic SRI
- District: $5,670- Atlas Curriculum Mapping
- $3,240- AlertNow
- $2,500- myLearningPlan
- $500- AirWatch (mobile device management)

**Professional Development:**
Budget for this area varies depending on new program initiatives. Service is provided to faculty and staff through:
- Dutchess County BOCES Model Schools
- Mid-Hudson Teacher Center (MHTC)
- After school sessions hosted by our teachers
- On-site vendor support for new program implementations

**Use of state and local resources:**
The District will file an annual application through Dutchess County BOCES to take advantage of any discounts available through the federal E-Rate program.

The District will continue to work closely with the Millbrook Educational Foundation, an organization that has generously provided funds for many projects that are vital to our operation and contribute to the success of our students.

The District will explore additional opportunities to form community partnerships and secure grant funding or donations from businesses and organizations (NYS Senator Saland, Tribute Gardens, Dyson Foundation, IBM, Marist College, Cary Institute, and our PTO).

The District will research and apply for any grants, local, state, or federal, that might result in additional funding for the support of technology in education.
Summary - New Programs & Aspirational Goals

Equipment
- Mobile Macbook labs for 12th, 9th, 6th, and Alden
- Explore mobile technology use (smart phones, tablets)
- Purchase digital textbooks, beginning with 8th and 10th grade courses
- Research a 1-1 (one laptop for each student) 7th grade pilot

Instruction: Courses
- Keyboarding instruction beginning at grades 3-5
- Core/Basic Technology Skills instruction for grades K-5
- Open computer labs/libraries for student use after school until 5pm

Instruction: Multimedia
- Media management tool to incorporate video production & broadcasting into student instruction and office use, for example Cisco Telepresence.
- Students publish video documentaries about businesses/attractions in the Millbrook area.
- “Flipped Classroom” - audio/video files as a tool for instruction (podcasts, video capture of class lessons/lectures, video libraries like Khan Academy, iTunes University).
- Electronic student portfolios to organize/display/archive student work.
- Videoconference meetings for staff working in separate buildings.

Professional Development
- myLearningPlan - track Professional Development
- “Teachers teaching teachers” via peer mentoring
- Students teaching students - “SWAT” (Students Who Assist with Technology)

Safety
- Building security - internal/external cameras, access system.
- Intercom systems that are integrated with our phone system.
- Digital attendance records and bus rosters for use with fire drills, evacuation drills, and in the event of real emergencies.
- Expand AlertNow phone notification system to include email and text messages to parents.

Administrative, State & Federal
- Update and expand use of Finance Manager
- Move to a “single sign on” where possible, for staff to access all password protected systems
- Local assessments and benchmarks
- Preparation for online PARCC assessments
- NYSED Parent Portal

Community Outreach
- Evening Computer Courses for Senior Citizens
- On demand viewing of public presentations (speakers, concerts, plays, Board of Education).

20
June 2013
Assessment of Current Resources

Support Staff:
1.0 FTE Technology Coordinator (Millbrook employee)
1.0 FTE Network Technician (DC BOCES Shared Service)
1.0 FTE Library/Media Specialist, Grades 6-12 (Millbrook employee)
0.4 FTE Data Specialist (Millbrook Employee)

Current Course Offerings:
Grades K-5: Core Technology Skills (required, content based on MCSD K-12 Core Technology Skills document)
Grades 3-5: Keyboarding Skills (required course, weekly sessions)
Grades K-12: Internet Safety (required courses)
Grades 3-5: Library Skills (required, once per month sessions)
Grade 6: Digital Literacy (required, 10 week course)
Grade 6: Graphic Arts (required, 10 week course)
Grades 7-8: Social Studies (technology integration courses)
Grades 6-8: GTT (required courses)
Grades 9-12: PLTW (elective courses)
Grades 9-12: English 9 & 11, Social Studies 10 & 12 (technology integration courses)
Grades 9-12: Graphic Arts (elective courses)

Plan Development

The revised Technology Plan for 2013-16 was created by the District Technology Committee, comprised of teachers, administrators, and support staff, along with input from the Board of Education and the Superintendent of Schools.

The District encourages community members to be part of the implementation of the plan, and the ongoing evaluation process. Parents, community members, and local business owners will be welcome to contribute through participation in Emerging Technologies groups, PTO activities, the Millbrook Educational Foundation, and other organizations. School newsletters, District newsletters, the Poughkeepsie Journal, and the Millbrook website will be used as tools for distributing information.

The District Technology Committee will meet periodically to review progress on the technology plan implementation and will revise/update the technology plan as warranted.