Section 1
District LEA Information

Michael Brooks         Superintendent of Schools
Michael Bakatsias     Assistant Superintendent for Technology & Personnel **
Robin Hecht            Director of Curriculum & Instruction
Rosann Mele            Director of Student Services
Patrick Witherow      Director of Finance & Transportation

** Instructional Technology Plan contact

About Our District

The Marlboro Central School District spans two counties, Orange and Ulster, in the beautiful Hudson Valley. The District is located within a suburban community along the historic Hudson River and its three school buildings serve approximately 2,000 students from the townships of Marlboro, Milton, Middle Hope and Plattekill. Located midway between Albany and New York City, the region is well known for its tourism and agriculture.

School Buildings

Marlboro District Office, 21 Milton Tpke, Milton, NY 12547
Marlboro Central High School, 50 Cross Road, Marlboro, NY 12542
Marlboro Middle School, 1375 Route 9W, Marlboro, NY 12542
Marlboro Elementary School, 1380 Route 9W, Marlboro, NY 12542
Section 2
Strategic Technology Planning

Vision

Through Board of Education policy and oversight, enable the Marlboro Central School District to create an environment and reputation that is highly regarded for its academic excellence, advancement of the arts, successful and participative athletic programs, and for developing our future leaders, all resulting in continuous improvement of the community in which it operates.

Goals and Beliefs

1. The Board of Education is committed to excellence. To that end, the Board of Education, in collaboration with the educational community, will evaluate policies and academic programs and commit to excellence in supporting quality programs which help students excel academically, socially, emotionally and physically. This sets an example of an evaluation cycle which fosters continuous improvement in all facets of our educational community.

2. The Board of Education is committed to managing the finances entrusted to it by the taxpayers of the Marlboro Central School District. To this end the Board will work diligently to find the appropriate balance between providing and expanding student programs in support of the districts visions and goals, and optimizing and reducing operating costs resulting in minimal or reduced tax liabilities to the community members living within our school district.

3. Continue practices that encourage and assure transparency in Board and administrative operations and communication of school district events, news and achievements through a variety of media; i.e. website, text, social media, news media, newsletters, etc.

4. Support a K-12 structure with program options at all levels that have the pathways and supports which allow students to graduate with the most advanced degree possible, with a rich array of courses on their transcript, and the highest GPA/Class rank attainable for each student.
5. The Board of Education is committed to working with the Administrative team to develop a results-driven measurement system using various sources of data to monitor and validate our programs, policies and staff investments are creating the desired outcomes and driving continuous improvements.

6. Support the administrative and teaching communities in their efforts to further the understanding and use of STEM technologies within the school district, and to enable and inspire students to obtain the right skills and experiences to prepare them for STEM related academic and career paths.

7. The Board of Education understands the importance of quality leadership and values a productive relationship with its superintendent and acts on his recommendations. To that end, the Board of Education expects the superintendent to provide the highest quality, most effective teachers, administrators and other staff by recruiting, retaining and empowering excellent employees who are adept at personalizing learning experiences for students while simultaneously holding principals accountable for meaningful school improvement.

What is the vision statement that guides instructional technology use in the district?

Support the administrative and teaching communities in their efforts to further the understanding and use of STEM technologies within the school district, and to enable and inspire students to obtain the right skills and experiences to prepare them for STEM related academic and career paths.

Goals that drive the attainment of the Vision

Goal 1: Digital Capacity and Access
Increased device access - Continue moving towards 1:1 device initiative (6-12) or increased device access (k-5) for students in all grades. MCSD seeks to provide technology-enhanced, culturally and linguistically responsive learning environments to support improved teaching and learning. With additional devices, we seek to increase the equitable access of high-quality digital resources and standards-based, technology-rich experiences.

Upgrade Network Infrastructure - Investing in high performing networks that can support all students in using devices and content. The resources for this investment will come from the Smarter Schools initiative of New York State

Goal 2: Digital Use: To support and evaluate that MCSD learners, teachers, and administrators are proficient in the use of technology for learning.
Goal 3: Digital Content: To maintain standards-based, accessible digital content that supports all curricula for all learners.

Planning Process

The district technology teams have quarterly technology meetings in each of our schools. We also have two newly formed STEM Committees; one in our Elementary School and one at the Secondary Level. The STEM Committees also meet quarterly. We administered a STEM Survey to help us gain insight into educators’ knowledge and experience with technology in the classroom.

Minutes from District Technology Team
October 19, 2018
June 12, 2018
February 5, 2018

Professional Development Plan – Building Capacity
We schedule on-going professional development to support faculty and administration using existing and newly purchased tools. These tools include teacher websites, online learning platforms (Flocabulary, ALEKS, Redbird, Gynzy, Modern Chalkboard, Problem Attic, etc.).

Additionally, we provide professional development to staff and students on building- and district-wide teaching, learning, and assessment applications, such as eSpark, Learning.com, Castle Learning, STAR Renaissance Learning, and eDoctrina. Professional development is also scheduled that targets student populations with special needs, including ENL and SWD. These applications include Recap, Screencastify, Pear Deck, Google Read & Write, QR Codes, Kahoot, Quizlet.

We survey staff to determine their needs regarding training for specific technology applications. We have a Technology Integration Specialist and a team of Instructional Technology Teaching Assistants who provide much of our district’s technology-focused professional development. Outside providers through our local BOCES are also used for providing professional development.

Measurement of Goals

The instructional technology goals will be measured and evaluated during and after implementation with the collection of formative data (classroom observation and tests/quizzes), local (midterms and quarterly exams), state (NYS Computer-Based Testing Program), and/or national LEAbenchmarks (STAR Renaissance Assessment).

We will review data reports from instruction software, such as Castle Learning, eSpark, eDoctrina, NoRedInk, Front Row, etc. to measure and evaluate the implementation of our goals.
Section 3 - Action Plan

### Goal 1: Digital Capacity and Access –
Increased device access - Continue moving towards 1:1 device initiative (6-12) or increased device access (k-5) for students in all grades. MCSDseeks to provide technology-enhanced, culturally and linguistically responsive learning environments to support improved teaching and learning. With additional devices, we seek to increase the equitable access of high-quality digital resources and standards-based, technology-rich experiences.

Upgrade Network Infrastructure - Investing in high performing networks that can support all students in using devices and content. The resources for this investment will come from the Smarter Schools initiative of New York State

<table>
<thead>
<tr>
<th>Action Step</th>
<th>Description</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action Step 1</td>
<td>Purchase devices for all students at a rate of approximately 2 grades per year in grades 6-12. (budget - $70,000)</td>
<td></td>
</tr>
<tr>
<td>Action Step 2</td>
<td>Purchase Windows 10 devices to support Minecraft EDU at the elementary school level. (budget - $10,000)</td>
<td></td>
</tr>
<tr>
<td>Action Step 3</td>
<td>Schedule replacement of network infrastructure district-wide. Resources to be funded by district and Smarter Schools funds. (budget - $750,000)</td>
<td></td>
</tr>
<tr>
<td>Action Step 4</td>
<td>Increase the investment of STEM related technologies and resources. (budget - $20,000)</td>
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</tbody>
</table>

### Goal 2: Digital Use - To support and evaluate that MCSD learners, teachers, and administrators are proficient in the use of technology for learning.

<table>
<thead>
<tr>
<th>Action Step</th>
<th>Description</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action Step 1</td>
<td>Learning.com - contains evaluations for both student and staff. Implement district-wide evaluations. (budget - $6,000)</td>
<td></td>
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<tr>
<td>Action Step 2</td>
<td>Use the tools presented by Common Sense media to evaluate administrative proficiency regarding current topics in technology-enriched learning environments. (budget - $2,000)</td>
<td></td>
</tr>
<tr>
<td>Action Step 3</td>
<td>Empower students and teachers through continued increases in access to technology-rich experiences. To accomplish this, MCSD will continue to invest in its Instructional Technology Teaching Assistants who provide support to classroom lessons using technology-rich media. (budget - $22,000)</td>
<td></td>
</tr>
<tr>
<td>Action Step 4</td>
<td>Support technology instructional staff development opportunities at the regional level. (budget - $6,000)</td>
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</tr>
</tbody>
</table>
### Goal 3: Digital Content: To maintain standards-based, accessible digital content that supports all curricula for all learners.

<table>
<thead>
<tr>
<th>Action Step 1</th>
<th>Continue integrating lessons across grade levels that model proper mental health habits, to include but not limited to Tech Addiction and Cyberbullying (budget - $22,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(budget - $6,000)</td>
</tr>
<tr>
<td>Action Step 2</td>
<td>Continue to educate and evaluate school based programs to ensure data privacy and security. (budget - $6,000)</td>
</tr>
<tr>
<td>Action Step 3</td>
<td>Provide professional development to support lesson creation that address the mental health of students in areas of tech-addiction and cyberbullying. (budget - $10,000)</td>
</tr>
<tr>
<td>Action Step 4</td>
<td>Provide opportunities for teachers and faculty to share and collaborate with technology-enriched lessons and activities. (budget - $10,000)</td>
</tr>
</tbody>
</table>

### Section 4 - NYSED Initiatives Alignment

**Explain how the district use of instructional technology will serve as a part of comprehensive and sustained effort to support rigorous academic standards attainment and performance improvement for students.**

Infusing classrooms with digital learning tools expands course offerings, experiences, and learning materials. Digital learning tools also support learning 24 hours a day, 7 days a week, build 21st century skills, increase student engagement and motivation, and accelerate learning. Technology links teachers to their students and to professional content, resources, and systems to help them improve their own instruction and personalize learning through flipped classrooms and blended learning models. This is accomplished through the use of tools, such as Screencastify, eSpark, and Recap.

The use of digital tools for the purpose of assessment allows teachers to gauge student understanding and progress almost instantaneously, making it possible for them to adjust their instruction as necessary to meet the individual needs of their students. With tools such as Recap, where students record themselves, students can reflect on their own learning. Learning Management Systems, such as Google Classroom help facilitate learning 24 hours a day, seven days a week, providing all stakeholders with a collaborative environment rich with high-quality resources.

2. **Students with disabilities may be served through the use of instructional technology as well as assistive technology devices and services to ensure access to and participation in the general curriculum. Describe how instruction is differentiated using technology to support the individualized learning needs of this student group.**

Devices specifically being used by students with disabilities include iPads and Chromebooks. Students with disabilities have been trained to use Google Read & Write for text-to-speech uses, as well as Google Hangout to allow office hours for teachers to extend beyond the traditional school day. Our district uses the ALEKS program to provide individualized remediation in mathematics in grades 5-12. This program allows for the reading of content to ensure the learning needs of all students are met.
Students can also use the built-in functionality in Google Docs in order to voice type directly in the program. Teachers can also use this tool to voice record student feedback, allowing students to interact with that feedback in a more engaging way. Google Classroom also allows for differentiation of content, as resources can be shared with an entire class, or with a specific subset of students within a class. Resources shared with in Google classroom can also be shared with students such that each individual student receives their own copy.

3. **How does the district utilize technology to address the needs of Students with Disabilities to ensure equitable access to instruction, materials, and assessments?**

- Class lesson plans, materials, and assignment instructions are available to students and families for 'anytime, anywhere' access (such as through class website or learning management system).
- Direct instruction is recorded and provided for students to access asynchronously (such as through a learning management system or private online video channel).
- Technology is used to provide additional ways to access key content, such as providing videos or other visuals to supplement verbal or written instruction or content.
- Text to speech and/or speech to text software is utilized to provide increased support for comprehension of written or verbal language.
- Assistive technology is utilized.
- Technology is used to increase options for students to demonstrate knowledge and skill.
- Learning games and other interactive software are used to supplement instruction.

4. **Please select the professional development that will be offered to teachers of Students with Disabilities that will enable them to differentiate learning and to increase their student language and content learning with the use of technology.**

- Technology to support writers in the elementary classroom
- Technology to support writers in the secondary classroom
- Research, writing and technology in a digital world Enhancing children's vocabulary development with technology
- Reading strategies through technology for students with disabilities
- Choosing assistive technology for instructional purposes in the special education classroom
- Using technology to differentiate instruction in the special education classroom
- Using technology to increase options for students with disabilities to demonstrate their knowledge and skills
- Multiple ways of assessing student learning through technology
- Electronic communication and collaboration Promotion of model digital citizenship and responsibility
- Integrating technology and curriculum across core content areas
- Helping students with disabilities to connect with the world
5. How does the district utilize technology to address the needs of English Language Learners/Multilingual Learners to ensure equitable access to instruction, materials, and assessments?

- Class lesson plans, materials, and assignment instructions are available to students and families for 'anytime, anywhere' access (such as through class website or learning management system).
- Direct instruction is recorded and provided for students to access asynchronously (such as through a learning management system or private online video channel).
- Technology is used to provide additional ways to access key content, such as providing videos or other visuals to supplement verbal or written instruction or content.
- Text to speech and/or speech to text software is utilized to provide increased support for comprehension of written or verbal language. Home language dictionaries and translation programs are provided through technology.
- Hardware that supports ELL/MLL student learning, such as home-language keyboards, translation pens, and/or interactive whiteboards, is utilized.
- Technology is used to increase options for students to demonstrate knowledge and skill, such as through the creation of a product or recording of an oral response.
- Learning games and other interactive software are used to supplement instruction.

6. The district’s instructional technology plan addresses the needs of English Language Learners/Multilingual learners to ensure equitable access to instruction, materials, and assessments in multiple languages.

Yes

6a. If Yes, check one.

- In the 5 most spoken languages in the district

7. Please select the professional development that will be offered to teachers of English language learners/multilingual learners that will enable them to differentiate learning and to increase their student language and content learning with the use of technology. Check all that apply.

- Technology to support writers in the elementary classroom
- Technology to support writers in the Secondary classroom
- Research, writing and technology in a digital word Writing and technology workshop for teachers Enhancing Children's Vocabulary Development with technology
- Writer's workshop in the Bilingual classroom
- Reading strategies for English Language Learners Moving from learning letters to learning to read The power of technology to support language acquisition
- Using technology to differentiate instruction in the language classroom
- Multiple ways of assessing student learning through technology
- Electronic communication and collaboration Promotion and model digital citizenship and responsibility
- Integrating technology and curriculum across core content areas
- Web authoring tools
- Helping students connect with the world
- The interactive whiteboard and language learning
- Use camera for documentation
8. How does the district use instructional technology to facilitate culturally-responsive instruction and learning environments?

- The district uses instructional technology to strengthen relationships and connections with families to assist in building a culturally responsive learning environment to enhance student learning.
- The district uses instructional technology to facilitate classroom projects that involve the community.
- The district uses instructional technology to develop and organize coherent and relevant units, lessons, and learning tasks that build upon students’ cultural backgrounds and experiences.
- The district uses instructional technology to assist in varying teaching approaches to accommodate diverse learning styles and language proficiencies.
- The district uses instructional technology to enable students to communicate and collaborate with students in different schools or districts in New York State, the United States, or with different countries.
- The district uses instructional technology to facilitate collaborative classroom projects among heterogeneous student groups.

Section 5 – Administrative Management Plan

1. Staffing Plan

<table>
<thead>
<tr>
<th>Department</th>
<th>Full-time Equivalent (FTE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Technology Leadership</td>
<td>1.00</td>
</tr>
<tr>
<td>Instructional support</td>
<td>6.00</td>
</tr>
<tr>
<td>Technical Support</td>
<td>4.00</td>
</tr>
<tr>
<td><strong>Totals:</strong></td>
<td><strong>11.00</strong></td>
</tr>
</tbody>
</table>
2. Investment Plan

<table>
<thead>
<tr>
<th>Anticipated Item or Service.</th>
<th>If you chose 'Other’ Anticipated Item or Service in the column to the left, please identify here. Otherwise, please write</th>
<th>Estimated Cost</th>
<th>Is Cost One-time, Annual, or Both?</th>
<th>Potential Funding Source.</th>
</tr>
</thead>
<tbody>
<tr>
<td>End User Computing Devices</td>
<td>N/A</td>
<td>350,000</td>
<td>Both</td>
<td>BOCES Co-Ser purchase District Operating Budget Grants Schools Bond Act</td>
</tr>
<tr>
<td>Network and Infrastructure</td>
<td>N/A</td>
<td>500,000</td>
<td>Both</td>
<td>BOCES Co-Ser purchase District Operating Budget Smart Schools Bond Act</td>
</tr>
<tr>
<td>Internet Connectivity</td>
<td>N/A</td>
<td>30,000</td>
<td>Annual</td>
<td>BOCES Co-Ser purchase</td>
</tr>
<tr>
<td>Professional Development</td>
<td>N/A</td>
<td>20,000</td>
<td>Both</td>
<td>BOCES Co-Ser purchase District Operating Budget Grants Instructional Materials Aid Instructional Resources Aid Smart Schools Bond Act</td>
</tr>
</tbody>
</table>

Administrative Management Plan cont’

3. Has the school district provided for the loan of instructional computer hardware to students legally attending nonpublic schools pursuant to Education Law, section 754?

   Yes

4. Please indicate whether or not the district has a public website.

   The district has a public website.
4a. Provide the URL of the district's public website: www.marlboroschools.org

5. Please indicate whether or not the district has assigned a specific person with responsibility for Information Security.
   Yes

   5a. If 'Yes' was selected in Question 5 above, please identify the responsible person’s title.
       Assistant Superintendent

6. Please indicate whether or not the district has assigned a specific person with responsibility for Information Privacy.
   Yes

   6a. If 'Yes' was selected in Question 6 above, please identify the responsible person’s title.
       Director of Curriculum & Instruction

7. Has a district-wide information security and/or privacy audit ever been performed in the district?
   Yes

   7a. If 'Yes' was selected in Question 7 above, please identify how often a security and/or privacy audit been performed?
       Every Two Years

   7b. If 'Yes' was selected in Question 7 above, please indicate whether the audit(s) was/were performed by independent 3rd party contractor.
       Some of the audits were performed by a 3rd party contractor – Mid Hudson Region Information Center

8. Does the school district provide for educating minors about appropriate online behavior, including interacting with other individuals on social networking websites and in chat rooms?
   Yes

9. Does the school district provide for educating minors about cyberbullying awareness and response?
   Yes

10. Does the district have an Internet Safety Policy?
    Yes, and I will provide the URL to the policy.

10b. Please provide the URL to the district’s Internet Safety Policy.
11. Does the district have a Cyberbullying Policy?
   Yes, and I will upload the policy.

11a. Please upload the district’s Cyberbullying Policy.
     7310.pdf

12. Does the district have a Parents’ Bill of Rights for Data Privacy and Security?
    Yes, and I will provide the URL to the Parents' Bill of Rights for Data Privacy and Security.

12a. What year was the Parents' Bill of Rights for Data Privacy and Security policy first posted?
     2015

12b. Please provide the URL to the district’s Parents’ Bill of Rights for Data Privacy and Security.

13. Does the district have an information breach policy that addresses the district’s planned response to an information breach?
    Yes, and I will upload the policy.

13a. Please upload the policy that addresses the district’s planned response to an information breach.
     7243.pdf

14. Provide a direct link to the district’s technology plan as posted on the district’s website.