Marysville Joint Unified

July 1, 2015 - June 30, 2018
1. PLAN BACKGROUND CRITERIA: The plan should guide the LEA’s use of education technology for the next three years.

1a. Provide a brief overview of the LEA, its location and demographics and/or share a link to the LEA’s website.

District Description and Demographics

Marysville Joint Unified School District (MJUSD) is located approximately 40 miles north of Sacramento in Yuba County. The district has approximately 9,600 students. It consists of two comprehensive high schools, three intermediate schools, fourteen elementary schools, one charter school serving students in grades 8-12, two continuation high schools, and one independent study school serving K-12 students. The breakdown of students is as follows:

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>K</th>
<th>Grade 1</th>
<th>Grade 2</th>
<th>Grade 3</th>
<th>Grade 4</th>
<th>Grade 5</th>
<th>Grade 6</th>
<th>Grade 7</th>
<th>Grade 8</th>
<th>Grade 9</th>
<th>Grade 10</th>
<th>Grade 11</th>
<th>Grade 12</th>
<th>Ungr Sec</th>
<th>Total Enroll</th>
<th>Adults in K-12 Program</th>
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<td>283</td>
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<td>275</td>
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<td>242</td>
<td>242</td>
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<tr>
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<td>1</td>
<td>4</td>
<td>0</td>
<td>69</td>
<td>0</td>
</tr>
</tbody>
</table>
District Vision, Mission, and Goals

Our Basic District Belief

We believe that:

- All students can meet and even exceed the outcomes established in Board Policy for graduation requirements and grade level promotion/retention standards.
- All students will have multiple ways of learning and demonstrating that they have learned those things required by district graduation requirements and grade level promotion/retention standards.
- Student success is a self-fulfilling process; the more we believe that all students can be successful and the more students experience success, the more success will happen.
- We have the ability within our district and community to develop the resources necessary to ensure that all students experience success.
- The achievement of this belief will take place in a life-long learning environment for Board, staff, students, and parents.

Our District Mission

Our mission is providing staff with the opportunities for professional development, career enhancement and satisfaction, and to become life-long learners. We also want to provide students with the opportunity to:

- master the district content standards adopted by the Board of Trustees.
- use information to communicate and solve problems.
- have high self-esteem.
- show respect for others, the environment, and the world.
- have the tools and motivation for lifelong learning.
- develop an appreciation of the arts.
- learn and apply basic technology skills that assist students to become life-long learners beyond school.
- learn career-related skills and attitudes.

Our District and LCAP Goals

**GOAL 1:** Provide learning opportunities that result in increased academic achievement and ensure quality classroom instruction for all students, including support systems which meet the needs of the targeted population.

**GOAL 2:** Enhance the current learning environment to ensure that our schools provide a physically and emotionally safe environment that is culturally responsive to all students.

**Goal 3:** Increase parent, family, and community involvement in the education of all students.
Plan Vision and Duration

This plan will be applicable July 1, 2015 until June 30, 2018.

MJUSD’s Technology Vision

MJUSD is committed to providing students, parents, teachers, administrators, and staff with the necessary technology and professional development required to succeed in today’s technologically advanced world. The new California Assessment of Student Performance and Progress (CAASPP) require students to have more advanced technology skills than they have needed in the past. This Technology Plan will guide the district over the three year period to create an environment where the following is expected:

Students and Teachers

Students will:

- Use current and readily accessible technologies
- Be guided by technologically literate teachers
- Become self-directed learners choosing topics of study and methods of learning
- Use technology to acquire real-world input into the learning process and to access and contribute to the global community
- Be fully capable of performing all of the technology skills required by the CAASPP

Teachers will:

- Have time and opportunities to learn new technologies and to collaborate and reflect with peers
- Integrate technology into their teaching
- Use technology to communicate with each other, with parents and with other members of the learning community

Technology

Technology will:

- Provide timely access to data and information
- Provide efficient and cost effective use of time and resources for management, teaching, and learning
- Promote diverse modes of communication
- Facilitate the development, organization, and presentation of ideas to achieve intended purposes
- Provide engaging instruction that will
  - Enable and stimulate users to express their creativity
  - Facilitate individual learning and teaching to maximize student success
  - Promote higher-level thinking skills to solve authentic problems
  - Promote learning of basic skills and content
  - Facilitate collaborative learning and teaching to maximize student success
  - Promote the integration of curriculum, disciplines, instruction, and modes of learning
- Promote adult, parent, and community learning, communication, and involvement.
Technology Related Priorities

The following four priorities were identified by the Technology Advisory Committee as most important in accomplishing the District’s goals and technology vision.

1. Technology Coaches – The most successful technology implementations have occurred when current teachers have been able to enter another teacher’s classroom and assist with lessons using the technology available in that classroom. Having coaches available on a regular basis would be very beneficial.

2. Technology Support Staff – With the increasing amount of technology being used in the classroom, additional staff to insure the equipment is working in an important need

3. More Devices - The goal for the district is to reach a 1:1 device to student ratio. The district has standardized on iPads for grades K-2 and on Chromebooks for grades 3-12. Laptops and Desktops will still be used as supplemental devices.

4. Five year replacement plan – To insure that all devices are able to run current software and applications it is important to having updated equipment.
1b. Describe how a variety of stakeholders from within the LEA and the community-at-large participated in the planning process.

The development process for this Technology Plan started with the Technology Director preparing an initial draft covering all of the areas that have been requested and prioritized by the district’s stakeholders over the past three years. The initial draft was then submitted to the Technology Advisory Committee for review.

The Technology Advisory Committee consists of representatives of all district stakeholders, including administrators, teachers, parents, local businesses, and the community. The committee was tasked with reviewing the initial draft and recommending appropriate changes. After modifying the plan according to the recommendations made by the Technology Advisory Committee, the Technology Plan was then sent to the Board of Trustees for approval. The Board of Trustees approved the plan on ________.

The Technology Advisory Committee Members

- Gay Todd - Superintendent of Schools, MJUSD
- Tony Danible - Board Member, MJUSD
- Bernie Rechs - Board Member, MJUSD
- Lennie Tate – Executive Director, Educational Services, MJUSD
- Amber Watson - Director of Nutritional Services, MJUSD
- Cynthia Jensen - Director of Facilities, MJUSD
- Bob Eckardt – Lindhurst High School Principal
- Kathleen Hansen - Foothill Intermediate/Loma Rica Elementary Principal
- Rob Gregor – Ella Elementary Principal
- Dean Allen – Marysville High School Teacher/Parent
- Troy Hane - McKenney Intermediate Teacher
- Heather Moural - Kynoch Elementary Teacher
- Melissa White - Olivehurst Elementary Teacher
1c. Summarize the relevant research and describe how it supports the plan’s curricular and professional development goals.

In 2010, Project RED performed an extensive study headed by Greaves to determine the best practices for implementing technology in education to increase the chances of success. They determined that properly implemented educational technology can substantially improve student achievement and that continuous access to a computing device for every student leads to increased academic achievement, especially when technology is properly implemented. This led to the conclusion that a 1:1 student to computer ratio is by far the most effective if implemented properly.

In their meta-analysis review of research conducted between 1993 and 2000 on the effectiveness of DES, Murphy et al (2001) found evidence of a positive association between use of DES products and student achievement in reading and mathematics, an association consistent with earlier reviews of the research literature on the effectiveness of computer-based instruction (e.g., Kulik & Kulik, 1991; Kulik, 1994; Fletcher-Flinn & Gravatt, 1995; Ryan, 1991). Students in the early grades, from pre-K to grade 3, and in the middle school grades appear to benefit most from DES applications for reading instruction, as do students with special reading needs.

In a 2000 study commissioned by the Software and Information Industry Association, Sivin-Kachala and Bialo (2000) reviewed 311 research studies on the effectiveness of technology on student achievement. Their findings revealed positive and consistent patterns when students were engaged in technology-rich environments, including significant gains and achievement in all subject areas, increased achievement in preschool through high school for both regular and special needs students, and improved attitudes toward learning and increased self-esteem.

O'Dwyer, Russell, Bebell, and Tucker-Seeley (2005) found that, while controlling for both prior achievement and socioeconomic status, fourth-grade students who reported greater frequency of technology use at school to edit papers were likely to have higher total English/language arts test scores and higher writing scores on fourth grade test scores on the Massachusetts Comprehensive Assessment System (MCAS) English/Language Arts test.

Michigan's Freedom to Learn (FTL) initiative, an effort to provide middle school students and teachers with access to wireless laptop computers, has been credited with improving grades, motivation and discipline in classrooms across the state, with one exemplary school seeing reading proficiency scores on the Michigan Education Assessment Program (MEAP) test, administered in January 2005, reportedly increasing from 29 percent to 41 percent for seventh graders and from 31 to 63 percent for eighth graders (eSchool News, 2005).

In examining large-scale state and national studies, as well as some innovative smaller studies on newer educational technologies, Schacter (1999) found that students with access to any of a number of technologies (such as computer assisted instruction, integrated learning systems, simulations and software that teaches higher order thinking, collaborative networked technologies, or design and programming technologies) show positive gains in achievement on researcher constructed tests, standardized tests, and national tests.

Cavanaugh's synthesis (2001) of 19 experimental and quasi-experimental studies of the effectiveness of interactive distance education using videoconferencing and telecommunications for K-12 academic achievement found a small positive effect in favor of distance education and more positive effect sizes for interactive distance education programs that combine an individualized approach with traditional classroom instruction.
Boster, Meyer, Roberto, & Inge (2002) examined the integration of standards-based video clips into lessons developed by classroom teachers and found increases student achievement. The study of more than 1,400 elementary and middle school students in three Virginia school districts showed an average increase in learning for students exposed to the video clip application compared to students who received traditional instruction alone.

Wenglinsky (1998) noted that for fourth- and eighth-graders technology has "positive benefits" on achievement as measured in NAEP’s mathematics test. Interestingly, Wenglinsky found that using computers to teach low order thinking skills, such as drill and practice, had a negative impact on academic achievement, while using computers to solve simulations saw their students’ math scores increase significantly. Hiebert (1999) raised a similar point. When students over-practice procedures before they understand them, they have more difficulty making sense of them later; however, they can learn new concepts and skills while they are solving problems. In a study that examined relationship between computer use and students' science achievement based on data from a standardized assessment, Papanastasiou, Zemblyas, & Vrasidas (2003) found it is not the computer use itself that has a positive or negative effect on achievement of students, but the way in which computers are used.

Research indicates that computer technology can help support learning and is especially useful in developing the higher-order skills of critical thinking, analysis, and scientific inquiry "by engaging students in authentic, complex tasks within collaborative learning contexts" (Roschelle, Pea, Hoadley, Gordin & Means, 2000; Means, et. al., 1993).

A large-scale experiment published by SRI International in 2007 showed that an artful integration of teacher professional development, curriculum, and software can focus teachers’ and students’ attention on more important and complex mathematics. Using established cognitive principles, software can be designed to provide interactive depictions of important mathematical concepts that help students understand connections across graphical and linguistic forms. With a modest investment in training the study determined that teachers could implement innovative software and curriculum which was shown to improve student gains in mathematics. (Roschelle, Tatar, Shechtman, Hegedus, Hopkins, Knudsen, Stroter, 2007)

MJUSD has considered some of the conclusions from the research that address the conditions under which technology has the most benefits for students. For example, this Technology Plan has stressed the importance of implementing technology into the curriculum, making it a fundamental part of the teaching that the students receive. It is recognized that simply teaching about computers in isolation is not the most effective way to increase student’s awareness of technology, but rather to have it be part of a conscious effort to include technology in everyday instruction. MJUSD also recognizes the importance of working toward a 1:1 student to computer ratio.

MJUSD will continue to utilize the mentioned studies, along with any new studies conducted, to develop models and strategies to maximum the influence technology can have in the classroom. The ultimate goal being student achievement advancing to a level where no school is classified as Program Improvement, and students feel they received an education that has effectively prepared them for continued education or to enter the workforce.

All MJUSD staff who work with children are trained in the importance of the developmental assets. The District recognizes the importance and responsibility every adult has in the development of each child as well as the need to nurture the internal qualities that guide choices and create a sense of centeredness, purpose, and focus.
As more resources become available, the District will strive to get to and stay at the forefront of innovative instruction. This Technology Plan will be evaluated annually to verify that technology is being integrated into curriculum in the most appropriate way possible, based on research from numerous sources.
2. **CURRICULUM COMPONENT CRITERIA:** The Plan must establish clear goals and realistic strategy for using telecommunications and information technology to improve education services.

2a. Describe teachers’ current access to instructional technology and current use of digital tools.

### CURRENT DEVICES THROUGHOUT THE DISTRICT

<table>
<thead>
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<th>School</th>
<th>Grades: K-2</th>
<th>Grades 3-12</th>
<th>iPads</th>
<th>Chromebooks</th>
<th>K-2 Ratio</th>
<th>3-12 Ratio</th>
<th>Grades: K-2</th>
<th>Grades 3-12</th>
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<td>6243</td>
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</table>
The numbers above represent the total number of devices that are currently on the district's inventory. The desktop and laptops are being used as supplementary devices in the classrooms as the district migrates to a 1:1 model using iPads and Chromebooks. By the end of the 2014-2015 school year, 429 computers will become older than five years old. By the end of the first year of this plan, the 2015-2016 school year, and additional 1444 computers will become older than five years old.

Every teacher has either a laptop or desktop to use and e-mail is available through Microsoft Exchange. Teachers with laptops are able to take them home, desktops stay at school. Teachers take attendance online using Aeries. Aeries also has a gradebook available that assists teachers with report cards. All teachers have access to classroom webpages using the SharpSchool system. Teachers also have access to Google accounts which provided them cloud storage and office productivity software. Many teachers use Edmodo as a classroom based social networking system as well as a collaboration tool with other teachers. A variety of devices are used throughout the schools including iPads and Chromebooks.

Illuminate is used as an academic data management system. The district is able to deliver both paper and computerized assessments that are aligned to the California Standards. Those assessments allow the teachers track student progress throughout the year and assist them with the determination of student grades. Teachers also have the ability to enter their own assessments into the system such as tests and/or quizzes.

2b. Describe students' current access to instructional technology and current use of digital tools.

Elementary Schools

The typical classroom for kindergarten through sixth grade in the district has at least 4-6 computers. In grades K-2, these machines are used for a variety of activities including Accelerated Reader tests, utilizing online typing programs, and accessing educational sites such as Education City. Every machine is connected to the Internet. The majority of sites (Covillaud, Dobbins, Johnson Park, Kynoch, Linda, Loma Rica and Olivehurst) have computer labs. At these sites, and in all third through fifth grade classrooms throughout the district, the computers in the classrooms are used for other educational purposes as well (typing reports, doing research, using other educational software, etc.) Each classroom has at least one printer connected for all the computers in the class to use. All computers have Microsoft Office installed and have the ability to connect to the Internet. At approximately half of the schools, computers are made available to students and parents for 30 minutes prior to the start of school, and 30 minutes after school. Smartboards with mounted projectors and document cameras are in more than 90% of the classrooms. Students have access to Google accounts, but they are used in grades 4-6 more often than in the lower grades. A number of sites have iPads and Chromebooks are becoming a very popular option.

Intermediate Schools

Most classrooms have three to five computers available for the students. All middle schools have computer labs available to students and teachers. All classrooms are networked. Access to the labs during school is on a sign-up by class basis. All computers have Microsoft Office installed, as well as Internet access. Carts of laptops and/or iPads are
also available. Computers are available in each library as well, but not all of the library computers are connected to the network at the request of the school site. Computers at these sites are only available to parents and students before and after school when requested by the user. When requested, computers are made available for approximately 30 minutes before and after school. Google accounts are being used in more and more classrooms. iPads and Chromebooks are also being utilized.

High Schools

Many of the classrooms do not have computers available to the students at the teacher’s request. This tends to be related to the subjects taught. Computers are available to students and parents before, during and after school when requested. Lindhurst and Marysville High school each have at least four computer labs that are used for teaching computer skills, research, and careers. Marysville Charter Academy for the Arts utilizes carts of Chromebooks that can be moved throughout the campus.

Other Schools

The following locations fall under the other schools category: North Marysville Continuation School, South Lindhurst Continuation School, and Abraham Lincoln Home School. All classrooms at these sites have Internet access and computers available for both teachers and students. All computers have Microsoft Office. Computers are not available before and after school, though school hours do not always fall during the same times as the traditional schools.

2c. Describe goals and an implementation plan, with annual activities, for using technology to improve teaching and learning. Describe how these goals align to the LEA’s curricular goals that are supported by other plans. Describe how the LEA’s budget/Local Control and Accountability Plan (LCAP) supports these goals, and whether future funding proposals or partnerships may be needed for successful implementation.

Goal 2c.1 - MJUSD will utilize Technology Coaches (TCs) throughout the district to assist students and teachers in utilizing available technology.

Technology Coaches can be implemented in a variety of ways. Some possibilities are:

- Full-time teachers who have student teachers assisting them in their classrooms can utilize available time to work with other full time teachers at their site to implement technology in the classroom.
- Utilizing extra duty subs or retired teachers, sites can provide time to teachers who have shown an aptitude for integrating technology to assist others.
- At the secondary levels, sites can work with teachers to utilize prep times to assist others. A new subject area will be focused on each year.
- If the LCAP budget committee chooses to fund coaches, they could be provided by the district.

The district will be adding Instructional Coaches (IC) in the 2015-2016 school year. Due to the new California Standards, publishers are adding technology pieces to be used during daily instruction. The TCs will work with the CCs to assist teachers in learning the technology pieces of the curriculum.
### Goal 2c.2 - MJUSD will add additional technology support staff to maintain the increasing technology in the district.

Site Technology Leads will be added to schools as funding is made available. Site Technology Leads will work with the district technology department to keep devices running as efficiently as possible.

- Using site funds, schools can fund a full FTE to assist with the technology at their site
- Using site funds, schools can partner with other sites to partially fund a Lead to assist with the technology at their site.

<table>
<thead>
<tr>
<th>Activities</th>
<th>Timeline</th>
<th>Dept(s)/Person(s) Responsible</th>
<th>Monitoring &amp; Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have each site select a Technology Coach(s) (TC)</td>
<td>Fall 2015</td>
<td>Site Administrators</td>
<td>List of TCs will be kept in the Technology Dept.</td>
</tr>
<tr>
<td>Assess teachers current technology skills by site</td>
<td>Continually</td>
<td>Technology Director, Site Administrators, TCs</td>
<td>TCs will perform site surveys</td>
</tr>
<tr>
<td>Spend time in other teacher's classrooms assisting them with using the available technology</td>
<td>Fall 2015</td>
<td>TCs, CCs, Technology Dept.</td>
<td>TCs and CCs will keep information on lessons performed and/or assisted with</td>
</tr>
<tr>
<td></td>
<td>Continually Thereafter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilize articulation time to develop grade level strategies for implementing technology</td>
<td>Fall 2015 - Continually Thereafter</td>
<td>Ed Services Dept., Technology Dept., TCs, CCs</td>
<td>TCs will keep records of assistance provided.</td>
</tr>
<tr>
<td></td>
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</tbody>
</table>
2d. Describe goals and an implementation plan, with annual activities, for how and when students will acquire the technology skills and information literacy skills needed for college and career readiness.

**Goal 2d.1 - Students will be instructed in increasingly advanced technology and information literacy skills to assure that they are college and career ready.**

<table>
<thead>
<tr>
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<th>Timeline</th>
<th>Person(s) Responsible</th>
<th>Monitoring &amp; Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCs and ICs will train teachers and provide resources on grade level student technology standards and information literacy skills.</td>
<td>Fall 2015, Ongoing Thereafter</td>
<td>TCs, CCs</td>
<td>Meeting and/or training notes will be kept at that schools sites.</td>
</tr>
<tr>
<td>TCs will review with teachers that their integrated technology will assist students in reaching their grade level technology and information literacy skills needs.</td>
<td>Fall 2015, Quarterly Thereafter</td>
<td>TCs</td>
<td>Updates on progress with teachers will be shared at quarterly meetings</td>
</tr>
<tr>
<td>Samples of student work will be collected at appropriate grade levels and evaluated</td>
<td>Spring 2015, Ongoing Thereafter</td>
<td>Teachers, TCs, Site Administrators</td>
<td>Evaluation of student work and test results will be performed</td>
</tr>
</tbody>
</table>

**Goal 2d.2 - The district will make available a device for each student to use in class.**

Using site and LCAP funding, the district will work to create a 1:1 student to device ratio. K-2 students will have a 1:1 ration with iPads. 3rd - 12th grade students will have a 1:1 ratio with Chromebooks. At the end of each year, the TAC will be given an update as to the current ratio. The number of devices needed can be found in the table in section 2a.
Goal 2d.3 - The district will develop a replacement plan that will guarantee devices are in proper working condition and are able to run current programs and applications.

Using site and LCAP funding, the district will work to replace laptops and desktops every five years. iPads and Chromebooks will be replaced when they are no longer able to run current applications. The Smarter Balanced recommendations will be used when determining appropriate age for student devices. Also, the district will work with sites to determine the ongoing cost of peripheral devices such as printers, projectors, bulbs, etc.

2e. Describe goals and an implementation plan, with annual activities, to address Internet safety and the appropriate and ethical use of technology, including AB 307 and Children’s Internet Protection Act (CIPA) compliance, in the classroom.

MJUSD is committed to educating our students to be responsible and safe digital citizens. At the beginning of every school year the technology department provides lesson plans for teachers that assist them with providing every student in the district with age appropriate lessons on internet safety, appropriate online behavior, and cyberbullying. The lessons are provided by Common Sense Media using their E-Rate toolkit. Each lesson includes handouts for parents so that they can provide the same information to their students that the teachers are giving in class.

The lessons are:

ELEMENTARY SCHOOL
One 45-minute lesson per grade per year
Grade - Lesson
K - Going Places Safely
1 - Sending Email
2 - Show Respect Online
3 - Talking Safely Online
4 - The Power of Words
5 - Digital Citizenship Pledge

MIDDLE SCHOOL
Two 45-minute lessons per grade per year
Grade - Lesson
6 - Safe Online Talk & Scams and Schemes
7 - Trillion Dollar Footprint & Cyberbullying: Crossing the Line
8 - Which Me Should I Be? & Cyberbullying: Be Upstanding

HIGH SCHOOL
One 45-minute lesson per grade per year
Grade - Lesson
9 - Private Today, Public Tomorrow
10 - Risky Online Relationships
11 - College Bound
12 - Taking Perspectives on Cyberbullying

More information can be found at https://www.commonsensemedia.org/educators/erate
3. PROFESSIONAL DEVELOPMENT COMPONENT CRITERIA: The Plan must have a professional development strategy to ensure that staff understands how to use these new technologies to improve education services.

3a. Summary of the teachers' and administrators' current technology proficiency and integration skills and needs for professional development.

During the Spring of 2015, MJUSD completed the full CAASPP for the first time. This has changed the thinking of how we look at the current technology proficiency of our teachers and administrators. During the summer of 2015, the technology department and the educational services department will develop a new survey to determine the current skill levels as they pertain to what CAASPP requires.

3b. Goals and an implementation plan, with annual activities, for providing professional development opportunities based on a LEA needs assessment.

MJUSD believes that proper technology integration will improve student achievement in both ELA and math and the professional development provided in technology integration will be done with that focus in mind. The district will evaluate the results of the teacher and administer surveys yearly to guarantee professional development is targeting the areas most in need.

At each site the TCs will develop site specific training plans. The plans will take into account the survey results as well as individual requests made by site staff. This will allow each site to focus the professional development on what most fits their needs. For instance, one site may find that iPads work well with their interventions while another site may find that they have more success in a computer lab setting. We want to make sure that each site has the flexibility to best meet the needs of their students and teachers. It is also important that technology become integrated into all facets of daily instruction. With that in mind, each TC will assist teachers in integrating technology into both ELA and math.
Using the above approach, the district’s primary professional development goal is:

**Goal 3b.1 - MJUSD Teachers and Administrators will develop a clear understanding on how to best integrate technology into their regular instruction in both ELA and math, with special attention given to subject areas identified by teachers and/or administrators based on the requirements of CAASPP.**

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>District will evaluate yearly survey results</td>
<td>Fall 2015 Yearly</td>
<td>Educational Services, Technology Dept.</td>
<td>Survey results will be kept in the Technology Dept.</td>
</tr>
<tr>
<td>TCs will evaluate survey results for their sites</td>
<td>Fall 2015 Yearly</td>
<td>TCs</td>
<td>Survey results will be kept by TCs</td>
</tr>
<tr>
<td>Grade level technology teams will be created to develop technology integrated lessons</td>
<td>Fall 2015, Ongoing</td>
<td>Technology Dept</td>
<td>Videos of teachers performing lessons will be made available</td>
</tr>
<tr>
<td>With assistance TCs develop technology training plans to improve integration into daily instruction</td>
<td>Winter 2015 Yearly</td>
<td>Educational Services, Technology Dept, TCs</td>
<td>Technology training plans will be available at each site</td>
</tr>
<tr>
<td>Sites will begin training according to their Technology training plans</td>
<td>Winter 2015 Ongoing</td>
<td>TCs</td>
<td>Training/meeting notes will be kept at the school sites</td>
</tr>
<tr>
<td>TCs will meet with grade level technology teams to learn new strategies</td>
<td>Winter 2015, Monthly</td>
<td>Technology Director</td>
<td>Meeting agendas will be kept in the Technology Dept.</td>
</tr>
<tr>
<td>TCs will meet quarterly to compare strategies and techniques</td>
<td>Fall 2015 Quarterly</td>
<td>Technology Director, Educational Services, TCs</td>
<td>Meeting agendas will be kept in the Technology Dept.</td>
</tr>
<tr>
<td>Surveys will be conducted yearly to assess teacher and administrator skills</td>
<td>Spring 2015 Yearly</td>
<td>Technology Director, Educational Services, TCs</td>
<td>Survey results will be collected and provided to TCs as well as the TAC</td>
</tr>
</tbody>
</table>
4. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, SOFTWARE, AND ASSET MANAGEMENT COMPONENT CRITERIA: The Plan must include an assessment of the telecommunication services, hardware, software, asset management, and other services that will be needed to improve education services.

4a. Describe the existing hardware, Internet access, electronic learning resources, technical support, and asset management already in the LEA that will be used to support the Curriculum and Professional Development Components of the plan.

The key to all of the above goals being met is adequate bandwidth, stable and reliable equipment, and the necessary support staff to guarantee the equipment works. Without reliable equipment, any technology project is destined to fail. With that in mind, this section will discuss how the MJUSD Technology Dept. is going to make certain that the necessary equipment, infrastructure, and support is in place to increase the probability of success for the Curricular Technology Goals and to give the students and teachers the greatest chance to succeed at the SBAC.

CORE INFRASTRUCTURE

MJUSD is currently in the process of upgrading the core infrastructure of the district’s network. Cisco routers, firewalls, and switches make up the backbone of the system. The upgrade is being performed with the main goal of providing the maximum amount of system resources possible for the CAASPP. The system will automatically identify CAASPP traffic and will adjust resources such as processor speed and bandwidth to give that traffic priority.

WAN

MJUSD participates in the state funded K-12 High Speed Network. Funding and operation of the ongoing California K-12 High Speed Network is administered by the Imperial County Office of Education, in partnership with the Mendocino and Butte County Offices of Education, and School Services of California, Inc. Through this system, the district connects to the Yuba County Office of Education for Internet services. Currently, this connection is made via a 1000 Mbps fiber connection. The district will monitor the effectiveness of staying with the K-12 High Speed Network and will change to a different service provider if it is determined to be necessary.

Elementary Schools

Currently – Nearly all elementary schools are connected to the district office via 100 Mbps fiber connection. Johnson Park elementary school is connected via 1000 Mbps fiber connection. Dobbins And Yuba Feather are connected via two 1.5 Mbps T-1 connections.

Intermediate Schools

Currently – All three intermediate schools are connected to the district office via 100 Mbps fiber connection.
High Schools

Currently - Lindhurst High School (LHS) is connected to the district office via 1000 Mbps fiber connection that is shared with Johnson Park Elementary. Marysville High School and Marysville Charter Academy for the Arts are connected to the district office via Gigabit Fiber connections.

Other Schools

Currently - South Lindhurst Continuation School connects to LHS via a Gigabit fiber line and shares the 1000 Mbps fiber connection at LHS. North Marysville Continuation School, and Abraham Lincoln School are connected to the district office via Gigabit Fiber connections.

LAN

Elementary Schools

Currently – Each school utilizes a Cisco router which manages the data connection as well as the voice over IP phone system. IDF locations contain Cisco POE switches. The connections between the MDF and IDF’s are 1 Gbps fiber connections. The connections to the desktop are at least 100 Mbps with many connections being 1 Gbps.

Needed – nothing currently. Technology Dept. will monitor LAN utilization to determine necessary upgrades.

Intermediate Schools

Currently – Each school utilizes a Cisco router which manages the data connection as well as the voice over IP phone system. IDF locations contain Cisco POE switches. The connections between the MDF and IDF’s are 1 Gbps fiber connections. The connections to the desktop are at least 100 Mbps with many connections being 1 Gbps.

Needed – nothing currently. Technology Dept. will monitor LAN utilization to determine necessary upgrades.

High Schools

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Needed – nothing currently. Technology Dept. will monitor LAN utilization to determine necessary upgrades.
WIRELESS

The district was able to utilize the E-Rate program, along with additional funding from facilities upgrades and the various after school programs to deploy a district-wide wireless-N system. The deployment utilizes secondary controllers at each site with a primary controller located at the district office. The wireless system is able to utilize multiple VLANs internally allowing the district to separate classroom connections from administrator connections. The system also has a rogue AP detection system that not only detects access points not controlled by the district, but also hits those access points with denial-of-service attacks making them unusable. The system was designed to be easily scalable to insure that it is fully capable of supporting the SBAC.

The last remaining site without wireless is the district office. This is because E-Rate funds were not available to cable the district office. A goal for the first year of the plan is to fund the necessary cabling which will provide for the installation of the access points. The district will continue to monitor the existing system to determine if any additional access points or system upgrades are needed.

SECURITY

MJUSD currently uses the following devices for various security purposes

- Cisco ASA firewalls
- Sophos – Antivirus
- Sophos Pure Message – Anti-spam
- Websense – Web Filtering
- Vlan’s separate administration data from classroom data.

The District will continue to look at additional security options to guarantee that confidential information is kept secure and that the network availability is more than adequate.

CURRENT EDUCATIONAL SOFTWARE USED

The following software is currently used for various educational and/or educational support purposes:

- Accelerated Reader – Reading software for grades 1-8
- Accelerated Math – Math software used in grades 8-12
- Star Reading – Reading software for elementary grade levels
- Star Math – Math software used in elementary and middle schools
- Publisher provided software resources in support of curriculum (Go Math, Write Steps)
- Microsoft Office
- Aeries – Student Information System
- Illuminate – Academic Data Management System
- Follett – Library Management System
CURRENT ADMINISTRATIVE SOFTWARE USED

- Escape - Personnel, Financial, and Inventory Software
- SmartFind - Substitute Employee/Leave Tracking System
- SchoolDude - Work Order system for Maintenance/Technology/Grounds
- Nutrikids – Nutritional Services software for managing meals in schools

The district will continue to look at additional software options and/or upgrades to guarantee the highest level of service possible.

CURRENT TECHNOLOGY DEPT. STAFFING

There are currently ten people in the Technology Dept. The current positions include:

- Director of Technology
- Senior Network Analyst
- Database Analyst
- Telecommunications Technician
- Network/Computer Technician
- Web/Computer Technician
- Computer Technician I
- Computer Technician I
- Computer Technician I
- Technology Assistant

4b. Describe the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, technical support, and asset management needed by the LEA’s teachers, students, and administrators to support the activities in the Curriculum and Professional Development components of the plan.

A priority for the 2015-2016 school year is to increase Yuba Feather and Dobbins Elementary schools bandwidth. The Technology Dept. will monitor bandwidth usage at all sites to determine necessary expansion in the future.

In an effort to maximize throughput for the CAASPP, the technology department is working to separate all internal data traffic from the external traffic which would include the CAASPP tests. The goal is to give the highest priority on the network to the CAASPP test.

The following is the recommended hardware replacement plan for computers and other technology items:
5. MONITORING AND EVALUATION COMPONENT CRITERIA: The plan must include an evaluation process that enables the school to monitor progress toward the specific goals and make mid-course corrections in response to new developments and opportunities as they arise.

5a. Describe the process for evaluating the plan’s overall progress and impact on teaching and learning.

Process for evaluating the plan’s overall progress and impact on teaching and learning

Student achievement will be closely monitored to determine the effectiveness of the instructional technology implementation. To keep this plan current, determine successfulness, and make implementation most effective the following activities will be undertaken, and data evaluated:

- The Technology Advisory Committee will meet annually. This committee will make recommendations on all parts of the Technology Plan, including budget decisions, minimum computer specifications, progress made, etc.
- The teacher and administrator surveys will be reviewed annually by the Technology Advisory Committee and the tech team.
- MJUSD will distribute information regarding district and site technology projects and initiatives on the district's website.
- MJUSD will coordinate the updating and revision of the plan on an annual basis through recommendations made by the Technology Advisory Committee.
- Results of the evaluation and surveys will be distributed among district staff through the MJUSD webpage.
- Student Assessment Data, etc. will be evaluated and analyzed to determine the plans successfulness in supporting the district in its effort to achieve its goals.

Schedule for evaluating the effect of plan implementation.

- The Technology Advisory Committee will meet bi-annually.
- The tech team will meet quarterly.
- The Technology Plan will be revised annually at the end of every school year.

The process and frequency of communicating evaluation results to tech plan stakeholders.

- The Director of Technology will provide the School Board, Superintendent, Cabinet, and Site Administrators with a district-wide progress report on an annual basis. The report will be developed by the end of May each school year. This report will show the district’s progress toward meeting the goals stated in the district’s Technology Plan. All stakeholders will be notified about the progress of the technology plan.
- After the second Technology Advisory Committee meeting of the school year, any suggested modifications to the Technology Plan will be made. The modified Technology Plan will be submitted to the Technology Advisory Committee before the first day of the following school year for approval. If additional discussion is needed, special Technology Advisory Committee meeting will be called. Once the committee approves the modifications, the plan will be submitted to the School Board for final approval. All stakeholders will be notified about modifications made to the technology plan. The final approved plan will be made available on the MJUSD Website at http://www.mjusd.k12.ca.us.