Murrieta Valley High School Site Technology Plan
Three Year Plan with Annual Review

Updated: 10/15/2017

SCHOOL HISTORY AND DESCRIPTION

Murrieta Valley High School is fully accredited by the Western Association of Schools and Colleges and is Murrieta's original high school. One of three comprehensive high schools in the Murrieta Valley Unified School District, it was recognized as a California Distinguished School in 1999 and currently serves 2410 students in grades nine through twelve. MVHS is located in the City of Murrieta, a suburb of San Diego and Los Angeles. Built in 1990 to serve the community with its then population of 19,101, the city has since grown to more than 100,000 people, making it one of the five largest cities in Riverside County. The City of Murrieta has been recognized as the safest city in Riverside and San Diego counties making it an ideal location for families and supported by its motto: Murrieta: "A Great Place to Grow."

Murrieta Valley High School is a strong, established high school with a reputation for academic rigor in its district, attracting students from other schools and districts in the community. Students and staff model The R.I.T.E. Way in their commitment to academic excellence through respect, integrity, teamwork and excellence. MVHS holds the distinction of being an IB World School by offering the IB Diploma. Students have the opportunity at MVHS to enroll in the IB Diploma Program, or take stand-alone IB and AP course offerings for acceleration and college credit. The variety of academically challenging options offered to students is only part of what makes Murrieta Valley High School stand out in its community.

Special programs offered at MVHS prepare students for their future pursuits and college, including the International Baccalaureate Program, an International Exchange Program, Advanced Placement and Advancement Via Individual Determination. MVHS offers award-winning Visual and Performing Arts programs with students competing in Robotics; Mock Trial, Science Olympiad, Virtual Enterprise, Choir, Drama, Art Competitions and Band Festivals. Students also participate in Peer Leaders Uniting Students (PLUS) and Link Crew teams to assist incoming freshmen. Our Marine JROTC program has been a cornerstone program on our campus and in the Murrieta community. The Associated Student Body and Senate Students lead the student body in assemblies, rallies, activities, and creating a positive school atmosphere and culture. MVHS promotes a climate of respect for all students and celebrate our diversity.

MVHS has a rich history that includes many traditions, and has truly established itself as a family. The family grows yearly as many former Nighthawks return to serve the community as faculty members. Counselors and teachers demonstrate their commitment to the nighthawk way by forming strong relationships with students, families, and the community; solidified through years of service and collaboration. The staff, students, and graduates are proud to be in a special group that can say "Once a nighthawk, always a nighthawk."

TECHNOLOGY PLAN MISSION STATEMENT

Murrieta Valley will implement current technology to differentiate instruction and provide students daily in class access to technology, while developing technological skills and experiences to compete in a 21 st century global market. Our current plan is to provide the best learning opportunities for our students.

TECHNOLOGY PLAN VISION STATEMENT

Murrieta Valley High School envisions the following goals to increase student learning outcomes:

1. Expand daily access to technology for all students in each classroom.
Teachers will develop content and modify their instruction to take advantage of the technology. Murrieta Valley High School will improve its wireless infrastructure to support the implementation of expanding the access to technology for all students.

2. Implement the "Blended" Classroom delivery model.
The teaching staff at MVHS will participate in professional development to build content to support the flipped delivery model. Students can access content at home, in the school library, or on a device within the classroom to prepare them for the next lesson. Teachers will be encouraged and supported to change or increase their existing pedagogical style to implement the flipped delivery model.

3. Create and establish student learning spaces.
The mounting of LCD projectors and screens will allow classrooms to be manipulated to provide an environment that is more student driven rather than teacher-driven. To meet the objectives of common core and MYP, students will utilize the flexibility of the classroom environment for enhanced collaboration and presentation formats.

4. Enhance access to online testing format now required for SBAC and other district benchmark assessments.
Increased number of devices will allow greater access to accomplished the required assessments that otherwise cannot be completed due to the scheduling conflicts in using the labs. These assessments include: SBAC, College/Career readiness sessions, Read-180, APEX, Think through Math, district benchmarks for English and math (science will likely be added in the future), SRI and SMI (universal screening), CTE Pathway

5. Build and implement a student driven tech support program.
MVHS will develop a student driven tech support program and train students to provide onsite tech support to students through one on one tutoring sessions and demonstrations and through video presentations that are available on the school website.

6. Establish ongoing professional development program for use of technology in the classroom and the "Blended" classroom model.
MVHS will establish an ongoing professional development calendar to support the implementation of the flipped classroom delivery model. Teachers will be encouraged and supported to attend additional training in technology and pedagogical methodology. "Tech 5" trainings tips at monthly staff meetings.

7. Utilize a 21 st century virtual classroom for teachers to increase best practices.
MVHS will implement the blended classroom model and increased incorporation of technology for content delivery, which supports Common Core Assessment processes. The use of Haiku, blended classroom and increased technology for Common Core implementation will provide a collaborative and hands-on approach to classroom instruction that requires students to work with other students, their teachers, experts in the community and around the world to develop a deeper knowledge of the subjects they are studying.

TECHNOLOGY COMMITTEE

Name	Position
Mark Pettengill	Principal
Stephen Diephouse	Assistant Principal
Jacob Johnson	ITL
Alanna Fields	ITC
Mariano Aranda	ITC

Deborah Santelices	ITC
Dana Rice	ITC

TECHNOLOGY PLAN REVIEW

2016-2017
The plan will be reviewed at the beginning of each semester by the ITL/ITC committee, leadership, and School Site council to evaluate the implementation of the plan and allocation of resources as funding mechanisms and needs change over time.

2017-2018
The plan will be reviewed at the beginning of each semester by the ITL/ITC committee, leadership, and School Site council to evaluate the implementation of the plan and allocation of resources as funding mechanisms and needs change over time.

2018-2019
The plan will be reviewed at the beginning of each semester by the ITL/ITC committee, leadership, and School Site council to evaluate the implementation of the plan and allocation of resources as funding mechanisms and needs change over time.

TRAINING AND SUPPORT

Training/Support	Timeline
Monthly technology trainings available on new technology, software, implementation ideas, collaboration, and sharing of lessons.	Monthly
Incorporate technology training into staff development days provided by the district.	on-going
Create a forum for technology lesson share-out from Technology PSG meetings through MVHS technology Haiku page.	Monthly
Implement specialized technology support from current staff on areas of expertise including the following (Haiku, Aeries, Blended Classroom, Microsoft 365, Google Drive, Network connectivity, Turnitin, and Shmoop.	on-going
Need to have continual workshop monies available to send our teacher experts on new trainings to keep up to date with technology advancements.	on-going
Release days for collaborative planning on incorporating the use of technology into lessons.	on-going
Support plan for ongoing technology replacement needs.	by June 2018
ITC and ITL's to attend CUE conference yearly.	Yearly
ITC and ITL's to be experts and provide trainings to other school staff.	on-going
Monthly technology training through PSGs.	Monthly

OUTCOME ON STUDENT LEARNING

Technology can assist students with concepts such as logical thinking, content creation, Internet research, and information synthesis. The table below serves as a guide to how the basic technology unit content varies across grade levels. Units are guided by essential questions and skills for each grade level and are categorized to show the scope of skills across the curriculum.

Technology Curriculum Scope

Grade	Online Safety/Digital Citizenship	Creativity and innovation	Communication and Collaboration	Critical thinking, problem solving, and decision making	Research and information fluency	Technology operations and concepts
9	Advocate and practice safe, legal, and responsible use of information and technology.	Apply existing knowledge to generate new ideas, products, or processes.	Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.	Identify and define authentic problems and significant questions for investigation.	Plan strategies to guide inquiry	Understand and use technology systems
10	Exhibit a positive attitude towards using technology that supports collaboration, learning, and productivity.	Create original works as a means of personal or group expression.	Communicate information and ideas effectively to multiple audiences using a variety of media and formats.	Plan and manage activities to develop a solution or complete a project	Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media	Select and use applications effectively and productively
11	Demonstrate personal responsibility for lifelong learning.	Use models and simulations to explore complex systems and issues.	Develop cultural understanding and global awareness by engaging with learners of other cultures.	Collect and analyze data to identify solutions and/or make informed decisions.	Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.	Troubleshoot systems and applications.
12	Exhibit leadership for digital citizenship.	Identify trends and forecast possibilities.	Contribute to project teams to produce original works or solve problems.	Use multiple processes and diverse perspectives to explore alternative solutions.	Process data and report results	Transfer current knowledge to learning of new technologies

ASSESSMENT

Effectiveness of technology purchases will be measured by the following: examination of frequency and effectiveness of use of labs by teachers, use of Haiku by students and teachers, and student performance on assessments.

- student achievement (SBAC testing results, District benchmark results, D/F rates by subgroups, universal screenings, APEX, CTE Pathway Completer, MYP Unit Plan assessments, Think Through Math, Read 180, California Colleges, ACT/SAT scores)
- perception of use of technology and effectiveness by students, staff, and parents (end of the year survey, senior survey)
- collection of teacher examples of technology lessons
- frequency of usage for software programs (shmoop, questia, turnitin, haiku, California Colleges, etc)
- professional development evidence (calendar, rating survey) to demonstrate training support to enhance implementation of technology
- Haiku analytics (frequency of access, type of usage for the students)
- California Colleges used for accountability measurements for college and career readiness (career interest, student profile, AG requirement completion, FAFSA, Job interview practice, Cal State college applications, developing portfolios) Percentage of students who are college/career ready.
- Data on student performance aligned to PLC goals and analyzed in PLCs.
- Single plan for student achievement goal 3 to implement the common core: Developing capacity in terms of knowledge and equipment to support digital learning in the 21st century.
- Single plan for student achievement goal 1: Increase formulation of instructional technology to increase student engagement through Haiku, Shmoop, Read 180, etc. By monitoring the number of D and F grades for students in the core content areas, the number of students who graduate high school as measured by graduation rate, the middle and high school dropout rate, the accessibility to all students who participate in webbased AP preparation program and access to CTE course sequence.

TECHNOLOGY ACTION PLAN

The goals for Murrieta Valley High School's faculty, staff, and students are:

To enhance faculty and staff competencies in technology	**to incorporate technology across the curriculum**	**to encourage students to use technology to demonstrate learning**
to orient students about the various forms of technology		

STEAM SUPPORT

All areas of STEM will be addressed through this technology plan. Please see the proposed resources chart for specific details regarding STEM purchases. Each STEM subject area will receive updated computer systems and devices to implement new software programs. Engineering is receiving a grant to help with specific needs, however, they will still need support to purchase updated computers in the classroom. Focus on NGSS/ele3ctives will be in 18/19.

INFRASTRUCTURE

Expand bandwidth and update old wiring to increase the capability of each classroom to actually access the speed and potential of the new devices. Need to anticipate increased usage as more wireless devices are purchased and used.

- Each classroom should have a wifihotspot to allow students to use wireless devices in a 1:1 ratio.
- Expand wifi hotspots to Gym/PE/sports fields, so teachers can access technology to take attendance and use devices.
- Additional wiring and outlets will be required for installing the A/V and speaker system and mounted projector system

CAREER TECH

College and Career readiness will be influenced by a number of different technology uses:

- California Colleges online program will be used by counselors in guidance lessons to help establish four year plans and achieve AG completion to increase students' qualifications.
- Microsoft 365 rollout to students to provide access to Microsoft suite tools to prepare them for using this system at both the university level and in the workforce.
- California Colleges used for accountability measurements for college and career readiness (career interest, student profile, AG requirement completion, FAFSA, Job interview practice, resume building, Cal State college applications, developing portfolios).
- SRI lexile results can be used in career classes to analyze future career prospects and required lexile levels to achieve career goals.

TECHNOLOGY SUSTAINABILITY

Since technology devices are all being updated at the same time, we can anticipate that replacement needs will likely occur in large quantities. To be proactive, we plan to make annual purchase of certain items in anticipation for replacement needs.

- purchase ___# bulbs for replacement each year. If the bulbs are unused that year, then they will be used for future needs.
- budget to replace/repair broken devices each year
- budget to upgrade software as it becomes obsolete
- budget to upgrade/replace devices as they become obsolete

EXISTING RESOURCES

Target Group/Area	Existing Technology	Application of Tech	Date Acquired	Needs
All	Teacher computers (all updated to windows 7, Office 2013)	To access Haiku, daily news, Aeries.Net (attendance, grading system), internet based sources for the classroom, to reserve computer labs on campus, to implement “Blended” classroom model	2013	
All	LCD Projectors (one in every classroom and computer labs) (#)	Lectures, Power Points, videos, announcements, “Blended” classroom model	2013	
All	ELMO (every teacher who requested one has one) (#)	Lectures, display of samples and modeling of skills	2016	
ELA/Math/Science	4 rolling Chromebook carts (40 each) – Accessible to all teachers through a signup process	To provide student access to technology within the lesson, internet research, college applications, career investigation, writing of reports, use of video instruction for conducting labs, designing student presentations and videos.	2013	
ELA/Math/All	5 computer labs for all teachers to access through a signup process.	To provide student access to technology within the lesson, internet research, college applications, career investigation, writing of reports, use of video instruction for conducting labs, designing student presentations and videos.	2013-present	
ELA/Math/All	7 Assigned classroom computer labs	Graphic design (HP Lab), photography (Mac Lab), TV/Digital Video (Mac Lab), 2 ITC classrooms (HP Lab), Drafting/Robotics (HP Lab). Yearbook Production lab.	2013-present	
All	1 Roving presentation stations (laptop, LCD projector, ELMO)	Checked out by teachers to be able to present in locations without presentation stations.	2013	
Health	40 Chromebook lab in a health classroom	Health curriculum is online and utilizing a hybrid format for instruction.	2013	

Math	20 Ipad cart in a math classroom	Used for “Blended” model instruction	2013	
Special Education	2 READ 180 labs with 8 computers each	Used on a threeway rotation for the English intervention course.	2013	
English	8 computers in the English Language lab	Access to Read 180 and other intervention programs for use with the EL population.	2013	Need additional computers for new sections of Read 180
All	82 new desktop computers (teacher computers)	Used to enter grades, use Aeries, use Haiku, facilitate class instruction, work with new AV system.	2016	Continue to replace aging 780 computers
Special education	8 chromebooks (1 for each counselor and RSP teacher)	Use for student meetings for individual guidance lessons and gathering of technology within the general education classrooms.	2013	upgraded to Surface Pro 2016
Special Education	30 chromebooks (10 per SDC teacher)	Use for individualized instruction, remediation, Think Through Math, and presentation formation.	2013	Older - need to replace
All	3 computers in student support center	use for PBIS	2013	
Math	WePresent Projector Adapter (13)	Use for Math rotational model.	2016	Devices to use with WePresent system
All	New AV Systems (90)	Sound system, projector, projector scree, document camera, and inputs.	2016	Additional needs for specialty AV systems

PROPOSED RESOURCES PHASE I

Proposed Resources	Total	How will resource be used to support student achievement?	STEAM (Y/N)	Date Acquired
Laptop Carts (35 laptops each)	16	Used to support core instruction - for student use.	Yes	
Desktop computers	14	To support additional special education sections of Read 180	No	
Laptop/Desktop	9	Dedicated computer for use with new AV systems (PE - Wrestling/Dance, Drama, Choir, Band, Robotics, Ceramics, Photography, Foods - to work with AV and/or flat panel TV's that were installed.	No	
Replace 780 desktop computers	180	Replace aging 780 student computers to support ICT/Design/Labs for English research, Math TTM, and assessments	Yes	
Choir/Drama Mic system to use AV system • Shure QLXD124/85 Handheld and Lavalier combo mic • RF Venue • Point Source Audio CR-8S-XSH-BE • Shure SLX 1 Bodypack transmitter J3 Band • Shure WL 185 Cardioid Lavaliere Mic • Soundcraft BF 10522002 Accessory Kit for Expression 2	6	Audio-Visual for Drama/Choir to be able to use the AV system that was installed.	No	
HDMI Cords	30	Back up HDMI cables to replace cords as they break. This is vital to keep systems up and running.	Yes	
Class set of ipads (35)	1	Class set of iPads for PE instruction	No	
iPad Pro	13	Math department - 1 per teacher to use for Math Rotations		

PROPOSED RESOURCES PHASE II

Proposed Resources	Total	How will resource be used to support student achievement?	STEAM (Y/N)	Date Acquired
Desktop Computers - Graphic Design Lab	36	Upgrade/replace 780 computers in Graphic Design Lab (811) - students will have access to the latest technology resources available for graphic design course. (SPECS: minimum 8gb ram, 20" wide screen monitor)	Yes	
Laptop Cart (36 computers)	1	Designated laptops for CTE program use. To allow CTE students to utilize current technology for instructional purposes within CTE courses.	Yes	
Desktop Computers for Yearbook	25	Upgrade yearbook lab (627) - require higher end workstations that can run the Adobe CC suite	No	
Desktop Computers for Read 180	24	Upgrade 780 computers for use with Read 180 program, complete RI assessments, TTM, and conduct researchMic	No	
Microphones for Read 180	50	For use with Read 180 Program (student use for labs 648/613/619/702)	No	
Hard line drops for classroom (627)	1	Drops need to be added to Yearbook lab to allow students to use the software and reduce load on wireless bandwidth at site.	No	
Digital Microscopes	16	To support NGSS implementation, student labs	No	
Laptops	10	For output device to receive input and display data generated from Vernier Probs	Yes	
Vernier Probs Software & Technology	10	To support NGSS implementation, student labs	Yes	
Touchscreen computer	3	For moderate/severe special education program. Used to implement new curriculum "Unique" and conduct CAA and SANDI assessments	Yes	
Adaptive Mouse	3	For student use with computers.	No	
iPad Pro Series	10	For ASL - used to record assessment, presentations, grading, used in small groups by students to record themselves and review signing. 5 - Bechtold, 5 - Ross	No	

PROPOSED RESOURCES PHASE III

Proposed Resources	Total	How will resource be used to support student achievement?	STEAM (Y/N)	Date Acquired
Replace aging chrome book carts	3	Replace aging chrome book carts (3 with 35 computers each). Used for student instruction, research, testing.	Yes	
RF Venue DFINDISTRO4 4 channel Antenna	1	Audio-Visual for Drama	No	
RF Venue DISTRO4 Channel Antenna Distro	1	Audio-Visual for Drama	No	
RF Venue ILAMP 10db In Line RF AMp/Booster	2	Audio-Visual for Drama	No	
Portable Sound System	1	Drama	No	
Live feed from stage to room 906/Foyer/prep room	1	Drama	No	
TV or monitor for lobby - and live feed	1	Drama	No	