

E. Hale Curran Technology Plan
Murrieta Valley Unified School District
Three-year Plan with Review



Plan Start Year: 2014-2015 School Year
Plan Expiration Date: 2017-2018 School Year

Acknowledgements:

District Technology Staff:
Director of Technology-Ken Balliger

School Administration:

Principal- Pam Roden

School Technology Leaders:

Technology Leader- Melissa Grabarkewitz
Technology Collaborator- Pam Guzman

School Technology Committee:

Kayla Olley- Teacher
Ashley Moore- Teacher
Jill Sheridan- Teacher
Heather Goka

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School Description and History

E. Hale Curran is a Title 1 school in Murrieta, California. There are approximately 600 students with 49% on free and reduced lunch. E. Hale Curran opened their doors in the fall of 1989 and has gone through many transformations including at one point being 1100 students to now a much smaller version with 600 students. E. Hale Curran has always been interested in the use of technology. We started in 1997-1998 getting our students trained using Partnered with Future Kids, a company who was writing curriculum to teach elementary students basic skills to use computers in the classroom. The home team of the company trained all teachers and the school was used as a model. Schools from California and Singapore came to see what we were doing. The goal was always to keep updated computers in the classroom and an updated lab. Money was put aside in the late 90's and early 2000's to keep our lab updated. First one computer per classroom then two was the goal and by 2003-4 when our school was over 1100 students we were successful by using various restricted and site funds.

During the 2004-5 school the school was awarded a grant of \$72,000 for new computers and software in our 4th and 5th grade classrooms. We were able to outfit classrooms with two computers each.

Late 2000's the school purchased 10 computers to create two mini-labs of 5 computers each to be house in two of our pods. These computers were mainly used to get our students on Fastmath and other new interventions provided by the district.

2007-8 – The school benefited from a district plan to outfit each classroom with an Elmo, speakers, and a projector. Fifth grade was completed first. The next year the economy fell and the plan was abandoned.

In 2008-9 with the purchase of READ 180 for Title 1 schools, Curran was able to benefit from receiving 6 new computers each year for our READ 180 lab. Each year the older computers were moved to classrooms for student use.

2009 – The district was able to purchase a new 32-station computer lab for our school with the use of Bond money. The lab is still currently in use.

Late 2007-2010 – Two Smart boards were purchased for use in a 3rd grade and Kindergarten classroom.

2011-2013 – The school Leadership team set a goal of having a document camera (Hover Cam) and projector in each classroom by January, 2013. The goal was met this past January and we are now ready to move ahead. E. Hale Curran is also piloting Math 180 and has thus purchased 16 laptops to use with this program.

2014-Present - With the implementation of the intervention program iRead, 50 computers were purchased to accommodate Kindergarten, 1st, and 2nd graders. We were able to purchase 10 iPads, which were given to Kindergarten and 15 Chromebooks, which were given to 4th grade. SMART equipment was donated, including an interactive projector and a Student Response System. We plan to keep our technology updated and stay in step with our students and help prepare them for the 21st century.

E Hale Curran Technology Mission/Vision Statement:

Mission Statement:

It is the technology mission of E. Hale Curran to redefine and enhance the way students learn and communicate in the 21st century by promoting innovation, creativity, and collaboration through the effective integration of technology.



Vision Statement:

It is the vision of E. Hale Curran to work together with teachers, parents, students, and community members to provide opportunities to educate students in becoming effective and ethical technology learners. Through the use of technology we will strive to:

- Provide differentiated, student-centered, and personalized learning environments
- Give students a voice and choice in attaining their learning goals
- Have students gather, use, and communicate information as global citizens
- Integrate the 4 c's of the 21st Century framework: collaboration, communication, critical thinking, and creativity, adding one more "c" due to our STEM focus, curiosity.

Technology Resources	How They are Being Used
9 mini iPads for use in the three Kindergarten classrooms 5 computers in each classroom in 1 st grade 7 computers in each classroom in 2 nd grade 5 computers in each classroom in 3 rd grade 15 Chromebooks for use in the two 4 th grade classrooms 15 laptops for use in the 5 th grade classrooms	Fasttmath, Raz Kids, ScootPad, Research, Reading Counts, Power Points, Edmodo, Readabout, Discovery Education, Learning A to Z, Science A to Z, Think Central, Haiku, iRead, System 44
Presentation stations in each classroom and one extra for use in meetings	Daily lessons, student and teacher presentations, teaching videos
2 Computer labs equipped with 34 Dell desktop computers	Above mentioned programs
2 interactive white boards- one in K and one in 3rd	Enhance student learning
READ 180 Lab with 8 computers	Replacement Language Arts Curriculum in 4 th and 5 th
Math 180 Lab with 16 laptops	Math intervention curriculum in 5 th grade
Intervention Classroom with 7 computers	To use with Intervention programs such as iRead and Raz Kids
1 mini lab with 6 computers (500 pod)	Used for above mentioned programs and research
15 iPads	Given to grades 1-5 for use with student learning
Various iPads and Chromebooks that a few teachers have	Used for student learning

E. Hale Curran Proposed Resources

Proposed Resources	How Will Resources be Used to Support Student Achievement	STEM	Learning Outcomes
Replace teacher/student desktop computers (Any Dell computer 780 or below); Add five computers to each classroom. Each classroom should have at least five student computers for student learning and to address interventions.	Current teacher/student computers lack processing speed and memory to perform new programs and run reports. Programs such as Read 180, Math 180, Fastmath, Raz Kids, ScootPad, iRead, Reading Counts, Edmodo, Readabout, Discovery Education, Learning A to Z, Haiku, LearnZillion, System 44, Read Live, STEM related projects, and research.	X	Updated computers will be able to handle the continuous updates and program improvements that are crucial to the fidelity of programs that are being used for student success.
34 Replacement Dell desktop computers in the 200 lab.	The computers in the 200 lab are outdated and are having a difficult time handling the newest software and constant updates.	X	Students need access to top running computers in order to prepare them to compete in the 21 st century.
15 replacement desktop computers in the intervention classrooms for READ 180 and System 44	New computers are needed for Read 180 and System 44 Next Generation intervention programs		Intervention students need to use new computers so they can successfully work through Read 180 and System 44 Next Generation.
Presentation stations in all classrooms/computer labs, library and multipurpose room. This basic package would include: ceiling mounted interactive projectors, built in sound systems, screens, and Elmos (document cameras).	To enhance student learning through high levels of engagement, participation, and STEM integration. Lessons requiring hands on computer applications, library resources, and presentations to and by students. Sound systems would enhance the delivery of lessons to promote student engagement and learning for all students especially those with auditory processing issues. Screens would allow educators to show content while allowing the use of the white board.	X	All students need an environment that is conducive to learning in the 21 st century in order to become college and career ready.

30 Laptops for our Robotics Program for use with Grades 2 nd thru 5 th .	Laptops are crucial for our Lego WeDo and HummingBird Robotics Programs.	X	Students need Laptops to program the Lego WeDo and HummingBird Robotics programs. They will apply their mathematics and coding skills to build and program Robotics.
Grades K-2- 10 laptops (5 per class) Grades 3-5- 90 laptops, (10 per class) Charging carts for each grade level	Laptops will help teachers differentiate to ensure students' needs are met. To enhance student learning through high levels of engagement, participation, STEM integration, and collaborative groups giving the ability to be mobile.	X	Students will be able to learn and apply skills that will aid in preparing them for the 21 st century. Older students need access to more laptops as Common Core dictates more collaboration and investigative skills in these grades.
Grades K-2- 100 iPad minis (10 per class) including protective cases Grades 3-5- 45 iPad minis (5 per class) including protective cases	iPads will help teachers differentiate to ensure students' needs are met. To enhance student learning through high levels of engagement, participation, STEM integration, and collaborative groups giving the ability to be mobile.	X	Students will be able to learn and apply skills that will aid in preparing them for the 21 st century. Younger students will need more iPads due to apps being more conducive to their learning.

3-D Printer in Exploratorium	For use with STEM based projects and the integration of curriculum.	X	Students will learn to use 3-D software that will encourages problem solving and creativity, which students need to be successful. Students will also be able to apply skills taught in other curricular areas.
9 interactive Tables (K, 1, 2)	To enhance student learning through collaborative exploration, discussions, and STEM integration	X	Young students will learn to interact and collaborate while investigating and solving problems.
Continued subscription to A to Z Learning, including Vocabulary, Science, and Writing, and Raz Kids, Discovery Education, and ScootPad	Learning software subscription for all teachers	X	Students will benefit from rich Common Core lessons and activities that aid in teaching 21 st century skills.
Hummingbird Robotics Kit (30) for use in grades 4-5	To optimize STEM integration through project based learning with the goal of preparing students to be college and career ready.	X	Students will learn to problem solve, create and persevere, as well as apply math skills
Lego Education WeDo Construction Kits combined with the WeDo software v.12 and Activity Pack for use in grades 2-3 (30 pack-15 kits)	To optimize STEM integration through project based learning with the goal of preparing students to be college and career ready.	X	Younger students will learn to problem solve, create and persevere as well as apply math skills

Lego Education Story Maker Kits (25 kits) grades 2-5	To enhance writing and creativity in keeping with our STEM focus	X	Students will learn valuable writing skills and apply them in a creative and engaging way.
MaKey MaKeys for use with grades K-5 (30 robotics kits)	To optimize STEM integration through project based learning and spark creativity with the goal of preparing students to be college and career ready.	X	Students will be able to create and program various robot type objects and apply valuable skills learned.
Apple TVs (1 per classroom)	To engage students in collaborative projects and share seamlessly with an audience	X	Students will increase their collaboration and presentation skills
Big Universe ebook library	Big Universe is an interactive ebook library with 60% of its titles nonfiction. Students will write and publish books and then share with other students by posting books on virtual bookshelves.		Students will be able to have access to all genres of books at their Lexile level to improve reading skills.
Headphones (with and without microphones) for all student computers	Ability to use software programs used for student learning in a less distracted environment.	X	Students will be able to focus on the task at hand.
Professional Development	Ongoing trainings, workshops, and support for staff		Students will benefit from highly trained teachers.
Educational Software to support STEM learning	To optimize STEM integration through project based learning with the goal of preparing students to be college and career ready	X	As STEM gains in rigor more programs and software will become available to help prepare our students for success

Apple Apps	Educational apps for iPads	X	Apps conducive for student engagement and to foster skills taught.
Updated wiring/wireless connection	Computer labs and classrooms can have uninterrupted internet access to support student learning		Students need learning spaces that provide uninterrupted wireless internet connections
Miscellaneous	Miscellaneous items to replace broken parts. wiring, network equipment, headphones, bulbs, software	X	

Priority List

This priority list is in order according to the needs of our school.

1. Replace **all** computers that are Dell 780 or less (this includes classrooms and computer labs).
2. 30 Laptops with the WeDo software and Scratch downloaded on each one - needed to run our Robotics programs (Lego WeDo (grades-2-3) and HummingBird Robotics (grades 4-5))
3. Classroom devices: Grades K-2 including SDC: 10 iPad minis and 5 laptops per classroom (11 classrooms), Grades 3-5 including SDC: 10 laptops and 5 iPad minis per classroom (10 classrooms) including charging carts for each grade level and protective cases for the iPads minis
4. Apple TVs in each classroom
5. Robotics: 10 more BeeBots for grades K-1, 15 more Lego WeDo kits for grades 2-3, 10 more Hummingbird Robotics kits for grades 4-5
6. Interactive projectors: To take the place of our current projectors (ceiling mounted)
7. 3D printer and software

E. Hale Curran
TECHNOLOGY ACTION PLAN OVER A THREE YEAR PERIOD
to be Reviewed and Updated on an Annual Basis

YEAR	GOALS	OBJECTIVES	RESOURCE ALLOCATION
YEAR 1	Develop Stakeholders Group (technology committee), Identify and evaluate existing resources, Come up with a needs assessment for new resources, Agree on technology plan, Establish funding	To establish a technology plan that will adapt to the needs of E. Hale Curran over time.	Look at existing resources to be equitable and fairly distributed depending on the needs of each grade level.
YEAR 2	Deploy new technology, Schedule trainings, Plan for support through PLCs, collaboration, and staff workshops, Investigate other sources of funding like grants, donations, partner with community members and businesses, Set up ways to evaluate student learning through computer based programs and classroom assessments	To initiate technology plan and make sure support is given where and when needed, To meet regularly with technology committee to evaluate and conduct needs assessment and resources for support, Develop Haiku page for staff to give feedback and ask for specific support	New resources should be distributed equitably depending on needs assessment, Support is ongoing and fluid

YEAR 3	Measure success, evaluate student learning, identify areas of improvement, and integrate technology in order to enhance student creativity, critical thinking, collaboration, communication and curiosity.	To use feedback from staff to identify areas that need improvement, to evaluate student learning through various programs such as RI, MI, Raz KIds, Readbaout, READ 180, iRead, Easy CBM, iReady classroom assessments, intervention reports, clas projects, and Smarter Balanced Testing.	Resources continue to be updated and allocated according to need and where best utilized
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Outcome on Student Learning

Our goal as an institute of education is to make certain our students are equipped with the necessary skills needed to be successful in whatever their endeavors may be as adults. The 21st century brings with it exciting and innovative advances in technology. In order for our students to compete in today's world, they need to be ready to create new technologies that will help make our world a better place to live. Not only do we want our students to be college and career ready we want them to reach for the stars. The following concepts and skills as well as using an integrated collaborative approach, offering meaningful and relevant learning opportunities, and allowing students to think outside the box will provide students with crucial skills for success.

- Internet research
- Logical thinking and problem solving
- Information synthesis
- Use of technology terminology
- Respect of copyright laws
- Understanding issues of plagiarism
- Proper computer etiquette
- Word processing
- Use of file commands
- Latest Microsoft operating system
- Spreadsheets for charts, graphs, managing data, sorting, classifying
- PowerPoint and other technology based presentation tools
- Multimedia integration in all subject areas
- Keyboarding skills
- Uploading documents to a learning platform
- Electronic communication
- Digital photography-multimedia
- Thoughtful evaluation of websites
- Understanding of BYOD stipulations and fair use practices
- Coding; Hour of Code
- Beyond Hour of Code
- Career technology opportunities

Training and Support:

Staff will be trained within grade level PLCs, District offered trainings, webinars, trainings listed on Haiku, after school workshops, and trainings at the site with technology support personnel.

Trainings needed:

- Continued Haiku Trainings
- Learning/Science/Vocabulary/Writing A to Z
- Discovery Education
- Raz Kids- reporting and assessments
- Training on basic computer skills and programs including any new upcoming programs and software
- Continued Common Core training with technology integrated focus
- NGSS training
- CAASSP training
- EDAMS
- Aeries Training
- STEM focused trainings
- Inquiry Based and Project Based Learning trainings
- Multimedia presentations
- iPad and Chromebook training
- Google: Google docs, Google Drive, Google apps, Gooru, Google presentations, etc
- Flipped Classroom/Blended classroom
- Essential Questioning
- Remind 101
- Microsoft software application training
- Think Central
- Continued trainings in Go Math
- Interactive Projector trainings
- ScootPad training

Technology Committee:

E. Hale Curran Elementary School
Murrieta Valley Unified School District
Murrieta, California

Pam Roden- Principal

Melissa Grabarkewitz-TOSA/Instructional Technology Leader

Tammy Koeppen- TOSA

Greg Nicholas- TOSA- Science Specialist

Andy Sosa- Teacher/Instructional Technology Collaborator

Trish Sluder- Teacher, member of tech committee

Jill Sheridan- Teacher, member of tech committee

Melissa Gillman- PTA president

Technology Plan Review:

Keeping in mind that the Technology Action Plan continues to be an evolving document over a three-year period, triangulation of data will be used to review current technology programs, trainings, and technological support. This technology plan will continuously be reviewed annually and semi annually or as the need arises to check validity of ongoing implementation of technology. A review of the implementation of technology will be the responsibility of the District and current administration, as well as members of the site tech committee.

Assessment:

Students will be evaluated through assessment tools such as SMI and SRI, EasyCBM, program data reports, and teacher observational journaling. Students will also demonstrate achievement through various performance tasks by using multimedia tools. This will empower students to solve authentic problems relating to an overall theme/concept using available technology (e.g., multimedia applications, internet, databases, spreadsheets, word processing). Students will also be evaluated once a year using the Smarter Balanced Assessment Consortium (SBAC). This is a state led consortium that develops next generation assessments, which will accurately measure student progress toward college and career readiness.

Digital Literacy and Technology Skills to Support the California Common Core State Standards

Digital Literacy Categories	Technology Skills	Grades K-2	Grades 3-5
1. Demonstrate proficiency in the use of computers and applications, as well as an understanding of the concepts underlying hardware, software, and creativity	Basic Operations	<p>1. Demonstrate beginning steps in using available hardware and application (e.g., turn on a computer, launch a program, use a pointing device such as a mouse).</p> <p>2. Explain that icons are symbols used to signify a command, file, or application.</p> <p>3. Identify, locate, and use letters, numbers, and special keys on the keyboard.</p> <p>4. Recognize the functions of basic file menu commands (e.g., New, Open, Close, Save, Print).</p>	<p>1. Demonstrate basic steps in using available hardware and applications (e.g., log into a computer, connect/disconnect peripherals, upload files from peripherals).</p> <p>2. Select a printer, use print preview, and print a document with the appropriate setup and operation.</p> <p>3. Use various operating system features (e.g., open more than one application/program, work with menus, use the taskbar/dock).</p> <p>4. Demonstrate intermediate keyboarding skills and proper keyboarding techniques</p>
	Word Processing and Desktop Publishing	<p>5. Use a word processing application to write, edit, print, and save simple assignments</p> <p>6. Insert and size a graphic in a word processing document</p>	<p>5. Use menu/tool bar functions in a word processing program (i.e., font size/style, line spacing, margins) to format, edit, and print a document.</p> <p>6. Copy and paste text and images within a document, as well as from one document to another.</p> <p>7. Proofread and edit writing using appropriate resources (e.g., dictionary, spell checker, grammar resources).</p>

	Database	<p>7. Explain that computers can store and organize information so that it can be searched.</p> <p>8. Use a simple computer graphing application to display data.</p>	<p>8. Define the term “database” and provide examples from everyday life (e.g., library catalogues, school records, telephone directories).</p> <p>9. Define terms related to databases, such as “record,” “field,” and “search.”</p> <p>10. Do simple searches of existing databases (e.g., online library catalog, electronic encyclopedia).</p>
	Spreadsheet (Tables/Charts and Graphics)		<p>11. Demonstrate an understanding as a spreadsheet as a tool to record, organize, and graph information.</p> <p>12. Identify and explain terms and concepts related to spreadsheets (i.e., cell, column, row, values, tables, charts, graphs).</p> <p>13. Enter/edit data in spreadsheet and perform calculations using simple formulas, observing the changes that occur.</p>
	Internet, Networking & Online Communication	<p>9. Explain that the internet links computers around the world, allowing people to access information and communicate.</p> <p>10. Demonstrate the ability to use tools in paintings and/or drawing programs.</p>	<p>14. Explain and use age appropriate online tools and resources.</p> <p>15. Save, retrieve, and delete electronic files on a hard drive or school network.</p> <p>16. Explain terms related to the use of networks (e.g., username, password, network, file server).</p> <p>17. Identify and use terms related to the internet (e.g., Web browser, URL, keyword, World Wide Web, search engine, links).</p>

			18. Use age appropriate internet based search engines to locate and extract information, selecting appropriate key words.
	Multimedia & Presentation Tools		19. Create, edit, and format text on a slide. 20. Create a series of slides and organize them to present research or convey an idea. 21. Copy and paste or import graphics; change their size and position on a slide. 22. Use painting and drawing applications to create and edit work.
2. Demonstrate the responsible use of technology & an understanding of ethics and safety issues in using electronic media at home, in school, and in society.	Ethics	1. Follow classroom rules for the responsible use of computers, peripheral devices, and resources. 2. Explain the importance of giving credit to media creators when using their work in student projects.	1. Explain and demonstrate compliance with school rules (Acceptable Use Policy) regarding responsible use of computers and networks. 2. Explain reasonable uses of technology and digital information; describe possible consequences of inappropriate use. 3. Explain Fair Use Guidelines for the use of copyrighted materials (e.g., text, images,, music, video) in student projects.
	Classroom and Society	3. Explain why there are rules for using technology at home and at school. 4. Identify the purpose of a media message (to inform, persuade, and entertain). 5. Describe how people use many types of technology in their daily	4. Identify ways technology is used in the workplace and in society. 5. Work collaboratively online with other students with teacher supervision. 6. Analyze media messages and determine if their purpose is to

		lives.	inform, persuade, and entertain 7. Explain that some Web sites and search engines may include sponsored commercial links. 8. Explain how hardware and applications can enable people with disabilities to learn.
	Health and Safety	6. Follow the school rules for safe and ethical internet use. (Use of internet in this grade span is determined by district policy.) 7. Demonstrate knowledge of ergonomics and electrical safety when using computers. 8. Explain that a password helps to protect the privacy of information.	9. Recognize and describe the potential risks and dangers associated with various forms of online communications. 10. Identify and explain the strategies used for the safe and efficient use of computers (e.g., passwords, virus protection software, spam filters, pop-up blockers). 11. Demonstrate safe email practices, recognition of the potentially public exposure of email and appropriate email etiquette (if the district allows student email use). 12. Identify cyber bullying and describe strategies to deal with such a situation. 13. Recognize and demonstrate ergonomically sound and safe use of equipment.
3. Demonstrate the ability to use technology for research, critical thinking, problem solving, decision making, communication, collaboration, creativity, and innovation	Research (Gathering and Using Information)	1. Use various age-appropriate technologies to locate, collect, and organize information. 2. Review teacher-selected internet resources and explain why each resource is or is not useful.	1. Locate, download, and organize content from digital media collections for specific purposes, citing sources. 2. Perform basic searches on databases to locate information. 3. Evaluate internet resources in

			<p>terms of their usefulness for research.</p> <p>4. Use content specific technology tools (e.g., environmental probes, sensors, measuring devices, simulations) to gather and analyze data.</p> <p>5. Use online tools (e.g., email, online discussion forums, blogs, and wikis) to gather and share information collaboratively with other students.</p>
	Problem Solving	<p>3. Use age -appropriate technologies (e.g., a simple graphing application) to gather and analyze data.</p>	<p>6. With teacher direction, use appropriate technology tools (e.g., graphic organizer) to define problems and propose hypothesis.</p> <p>7. Use spreadsheets and other applications to make predictions, solve problems, and draw conclusions.</p>
	Communication and Collaboration	<p>4. Use a variety of age-appropriate technologies (e.g., drawing program, presentation software) to communicate and exchange ideas.</p>	<p>8. Create projects that use text and various forms of graphics, audio, and video (with proper citations) to communicate ideas.</p> <p>9. Use teacher-developed guidelines to evaluate multimedia presentations for organization, content, design, presentation, and appropriate use of citations.</p> <p>10. Communicate with other students and other classes using appropriate technology, including email.</p>

