



# **Educational Technology Plan**

## **2016 – 2019**

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We are educating for the future:  
forging a path for tomorrow's innovative, global thinkers.

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# Introduction

The Del Mar Union School District is an elementary district serving grades Kindergarten through 6<sup>th</sup> grade located in San Diego County, California and serves approximately 4,300 students. Families are attracted to our District based on the outstanding learning opportunities and highly effective educational programs. Our student population has a diverse variety of cultures and ethnic backgrounds as evidenced by the following chart based on 2015-2016 CalPads data.

California Department of Education <b>CALPADS</b> California Longitudinal Pupil Achievement Data System																		
1.3 Enrollment - Primary Status Disaggregated																		
Academic Year: 2015-2016 View: Snapshot				LEA: Del Mar Union Elementary School Type: ALL School: ALL				User ID: kabetran Create Date: 2/27/2016 1:31:01 AM Print Date: 5/31/2016 11:38:19 AM										
		Total	Hispanic		Am Indian/Alskn Nat		Asian		Black/African Am		Nat Hwini/Othr Pac Islndr		White		Multiple		Missing	
School Code	School Name	#	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Total - Selected Schools		4334	413	9.53%	6	0.14%	1331	30.71%	23	0.53%	6	0.14%	2277	52.54%	274	6.32%	4	0.09%

Technology in the Del Mar Union School District will enhance student learning, improve the efficiency and productivity of staff members and facilitate communication among students, staff, and parents. This Plan addresses the following issues:

- Integration of technology into all classrooms to meet the needs of all students, provide individuality and choice, and enhance learning opportunities.
- Professional development for all staff to ensure that technology is used to transform learning opportunities for all students.
- Maintenance and update of infrastructure to ensure that technology tools are used seamlessly.
- Budget projections for future technology needs.
- Process for monitoring the implementation of the plan.

## **Del Mar Union School District Vision, Mission, Core Values, and Strategic Plan Core Strategies**

### **Vision**

We are educating for the future: forging a path for tomorrow's innovative, global thinkers.

### **Mission Statement**

Del Mar Union Schools provide a nurturing, inspiring, and rigorous educational program for each of our students. With a collaborative community and dedicated staff, we continually evolve to develop:

- Well-rounded and fulfilled individuals.
- Motivated lifelong learners.
- Future leaders prepared for the challenges of a changing world.

### **Core Values**

We believe:

- Every individual needs to be valued.
- Everyone has the right to be safe.
- The unique abilities of each child need to be identified and developed.
- Lifelong learning is an expectation for children and adults.
- Collaboration among students, staff, parents and community leads to success.
- Our children are future leaders in honesty, integrity, and transparency.
- In treating others with respect.
- In forward thinking and action.
- In the principles of democracy.

### **Del Mar Union School District Strategic Plan Core Strategies**

These shared Core Strategies are the glue that holds us together as our primary methods and approaches to achieving our Vision and Mission.

- **Educational Program:** We will implement and assess a comprehensive educational program based on 21st Century learning skills to educate the whole child.
- **Technology:** Every student will actively use technology to develop 21st Century skills within a safe and secure digital environment.
- **Professional Development:** The professional development program, which includes time for planning, collaboration, and in-services, will support ALL District employees to provide a nurturing, inspiring, and rigorous educational program.
- **Communication:** We will facilitate communication with stakeholders at every level consistent with our core values to promote our mission and to achieve our vision.
- **Funding:** We will actively pursue funding to maintain a stable level of resources necessary to fulfill our mission.
- **External Relations:** We will establish partnerships with corporate entities and community members.
- **Facility Optimization:** We will develop a plan to maximize functional use of facilities.
- **Student Safety and Well-being:** We will provide a safe and nurturing environment that encourages student engagement and individual ownership of learning.

## **Del Mar Union School District Vision for Technology and Guiding Principles**

### **Vision for Technology**

Technology facilitates the purposeful integration of learning between subjects, throughout the day, and across the school site in order to individualize learning and allow for student choice. Through training and regular use of technology staff are experts in ensuring that the right technology tool is used to provide our students with opportunities to learn and share knowledge that would otherwise be unimaginable. A culture is clearly established around the willingness to embrace new ideas and proactively use technology by continually infusing local and global best practices, current trends, and future projections into all conversations about teaching and learning.

### **Technology Guiding Principles**

*“Designated for their potential to improve student learning”*

- All students and staff have immediate access to technology whenever necessary
- The right tool is available and used whenever it is possible and appropriate
- The interaction between technologies is seamless
- Learning environments are equipped with technology tools to support all students
- Students take ownership over determining the right technology tool for each activity
- Students are good digital citizens
- Internet access is reliable and consistent
- Technology is purposefully integrated to support clear learning goals
- Technology Specialists propel staff and student use of technology in innovative and purposeful ways
- Technology is the vehicle used to provide enhanced opportunities for rich multi-media collaboration and communication within and beyond the classroom
- Teachers and administrators actively explore and implement emerging trends in the effective use of technology for their potential to improve student learning

# The Vision in Action

Carmel Heights School is a typical elementary school in the Del Mar Union School District going through a typical day of teaching and learning during a typical mid-week school day in March of 2021. The Del Mar Union School District has seen transformative growth in the use of technology that makes this school look far from typical to the eyes of an outsider who had not visited a Del Mar school since June of 2016. As the Del Mar Union School District kept a steadfast focus on preparing students for jobs that don't yet exist and a world that has not yet been envisioned between June 2016 and March 2021, they focused on the thinking skills needed for our students to succeed and how technology could be used to transform learning.

In 2021, students access information from a wide range of resources that cover a span from traditional books to peers in other states and countries to experts in various fields to first-hand virtual experiences. They are able to analyze and synthesize information gleaned from these various resources to create questions, hypotheses, and solutions that help them to share their learning and solve real-world problems. Students then share their new ideas broadly, going well beyond the school walls to push their thinking back out into the world using communication tools that fit the content they have created and the audience they are targeting through blogs, videos, public service announcements, essays, speeches, and ad campaigns.

## **A Day at Carmel Heights School, March 2021**

Before school starts, teachers arrive to prepare for the day. A fourth grade teacher reviews discussion posts that his students made as part of their homework the previous evening. He is preparing for their discussion about the history of California Missions today that he will accentuate through a virtual field trip of Mission Santa Barbara. As this unit moves forward, he is looking forward to asking students to use Minecraft to create their own mission after which they will use screen capture software to record a docent tour of their creation.

Just after the school bell rings, teachers begin to take attendance using the district's student information system. When all attendance is taken, the office is informed, and families are contacted to confirm absences.

Over the course of the day technology is used seamlessly to transform learning tasks across grade levels and throughout the site.

In sixth grade, a student has worked with her teacher to reach out to an expert in plate tectonics from UCLA who is now engaging in a live video conference to provide the class feedback on an early warning system that they have researched, written about, and for which they are now working on an ad campaign.

Across the school in a first grade classroom, students are engaged in a guided reading lesson with their teacher. They are all using iPads with texts that have been selected to match their reading level. After finishing with the teacher portion of the lesson, they use the iPads to

access the district-adopted learning management system where the teacher has created questions about the text that they will work on in a small group.

A parent volunteer enters the front office and uses the Raptor visitor system to confirm that she is a parent and to identify where she will be helping out today. This system keeps track of all visitors on campus and where they are so that staff can account for all of our school community in the case of an emergency.

Our parent volunteer enters the school and walks to the Innovation Center where her third grader is working with his teacher, the Science Specialist, and the Technology Specialist on an integrated Design Thinking project. The students are working on how to trap and use the rain and dew that comes off of the school's roof in order to water the plants at Carmel Heights. They have come up with a variety of ideas, researched them, and connected with students at a green school in Phoenix that is trying to accomplish the same task. With the help of the Science and Technology specialists, students are working in teams to create prototypes for how they could use angles and forces such as gravity to move the water to a desired location. 3-D printers help them design prototypes, and each group is creating a presentation to share with the school.

As the school day comes to an end, teachers take their laptops and head to the school's staff meeting room. Staff will be engaging in a district-wide training on the newest technology tools to transform lessons that is being conducted at the District Training Room and broadcast to each school to maximize time and efficiency. Today's professional learning is focused on informational reading and writing, and teachers will be building a lesson in their learning management system that they will use with their students tomorrow.

As the teachers wrap up their learning for the day, they are excited about the prospect of guiding their students through another unit that is focused on identifiable learning goals, addresses specific standards, and culminates in opportunities for their students to work on a real-world problem. They look forward to seeing their students research the problem that has been identified, analyze the information they find to determine the most valuable pieces, and synthesize this information into their own solution, and they know that their students will find a variety of ways to share these real world solutions that address the new content they have created in a way that will engage the audience they are seeking to inspire!

# I. Plan Duration

The duration of the Plan will be three years (July 1, 2016 through June 30, 2019); the Plan will be reviewed and updated annually through the district's strategic planning process. The focus of this technology plan is the curriculum and professional development components while maintaining hardware, and infrastructure standards. The purpose of this 3-year Plan is to identify strategies that will help the Del Mar Union School District meet National Education Technology Standards (NETS) and promote student achievement on State and District adopted subject and grade level standards through the use of technology. Del Mar School Union District strives for effective integration of technology into the classroom in support of student achievement. The Del Mar Union School District Educational Technology Plan outlines our vision of where the District would like to be at the end of the 3-year period (June 30, 2019).

The Director of Technology, Assistant Superintendent of Curriculum and Instruction and the Superintendent of Schools are responsible for monitoring implementation of this plan. The plan will be reviewed and revised on an annual basis through the district's strategic planning process. The Director of Technology will then work with the Superintendent and Assistant Superintendent of Curriculum and Instruction to implement any required revisions directly with site-based administrators.

## II. Stakeholders

The stakeholders to this technology plan include teachers, administrators, and classified employees representing all sites, the district, and information technology staff. Input was gathered from all members of the below stakeholder group.

<b>Stakeholders</b>			
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In addition, a Technology Planning Committee comprised of two administrators, two classroom teachers, two technology specialists, a classified staff member, a parent, and the Director of Technology met to review needs, identify goal areas, and provide input on final goals.

<b>Technology Planning Committee</b>	
Araiza, Gilbert	Instructional Aide, Torrey Hills
Delehanty, Chris	Director of Technology
Firestone, Vivian	Principal on Special Assignment
Lerner, Julie	Principal, Del Mar Hills Academy
Lima, Erik	Fifth Grade Teacher, Sycamore Ridge
Ravad, Yvonne	Parent, Ocean Air
Smith, Amy	Technology Specialist, Ocean Air
Tiffany, Jackie	Kindergarten Teacher, Ashley Falls
Wolfertz, Janet	Technology Specialist, Carmel Del Mar

The Del Mar Union School District’s Educational Technology Plan is based on California State Standards and the Strategic Plan of the Del Mar Union School District in order to deliver rigorous academic courses. The Strategic Planning Committee sets yearly priority actions in the area of technology to ensure that the District is continually moving forward utilizing the power of technology as a tool for effective instruction, assessment, and as a resource for student and staff learners to support 21<sup>st</sup> Century learning. The Technology Plan will be reviewed and updated annually as part of the district’s strategic planning process to include the identification of priority actions that will guide work toward attaining the plan goals.

The Technology Plan provides success indicators for each goal that identify what successful implementation will look like. These are written as observable actions such as “Teachers will actively use the SAMR model as a tool for thinking about purposeful integration of technology when planning lessons and units of instruction” or “Students will intentionally access a variety of resources in order to actively find information in order to solve problems, answer questions, and further their understanding both on their own and with support from staff.”

The Technology Plan is broken into four major sections: Instructional Program; Professional Learning; Infrastructure, Hardware, Technical Support and Software; and Funding and Budget. Monitoring and evaluation of the plan will be done through the district’s strategic planning process.

**Instructional Program** goals are focused on observable goals that will directly impact the classroom but are not considered professional learning. These goals include student outcomes and teacher outcomes, supporting the needs of all students, and communication between home and school.

**Professional Learning** goals are focused on the continual learning process in which all Del Mar Union School District staff engage. These goals focus on observable actions that will support increased proficiency, integration, and use of technology, as well as parent learning and a focus on digital citizenship.

The **Infrastructure, Hardware, Technical Support, and Software** section is focused on the ongoing evaluation of infrastructure, hardware, and software needed to maintain an up-to-date network that allows classroom technology to run seamlessly. Adequate

infrastructure must be present and fully functional for complete professional development and curriculum integration to occur. The infrastructure includes networking capacity and Internet access, plus hardware, software, and technical support.

The **Funding and Budget** section focuses on projected costs for future technology needs identified by this plan.

# III. Instructional Program

## Description of teachers' and students' current access to technology tools

All eight District schools are equipped with multiple technology tools for teacher and student use. We are currently providing over 4000 technology tools to support the technology goals of the District. All learning spaces are connected, through Ethernet switching technology and wireless access points throughout the District. This data network infrastructure provides students and teachers access to a variety of information resources including student academic data, Internet access, e-mail, a student information system, Google Apps for Education, a learning management system, a library electronic catalog, and District administrative functions in a safe and secure digital environment.

### **Labs:**

All schools have a Technology Lab equipped with 30 Macintosh computers (leased in 2015) connected to the network. Each computer is configured with access to the Internet, word processing, spreadsheet applications, presentation software and related courseware that is grade-level appropriate. All schools provide separate, scheduled technology classes taught by credentialed teachers. All students have equal access to these technology resources.

### **Classrooms:**

Every classroom in grades three through six has one Chromebook for each student. In kindergarten through second grade, each class has either a small group of iPads, desktop computers, or both. The goal of the Del Mar Union School District is to ensure that all kindergarten through second grade classes have eight iPads for use in small group instruction. There are currently approximately 3,400 Chromebooks and 375 iPads being used across the district.

Each classroom is set up with technology to support instruction that includes a teacher laptop with Internet access, access to a networked printer, a VOIP Telephone, and either a LCD projector with speakers and Document camera or an iPad, Apple TV, and 80-inch TV monitor.

Modern Learning Studios were piloted during the 2015-2016 school year in a total of six classes at two school sites. These classrooms are equipped with flexible furnishings, interior renovations to increase floor space and provide color choices that support learning, and an integrated audio/video system that includes two 80-inch monitors, ceiling-mounted speakers, a wall-mounted touch panel to control audio and video, an iPad, and an Apple TV and two Chromecasts that are used for mirroring devices to the screens.

### **Library Media Centers:**

All schools have a Library Media Center with a small group of computers available for students. All media centers use online card catalogs, and some provide access to E-books. All media centers were provided with a new iMac desktop for the Library Media Specialist at the beginning of the 2015-2016 school year.

**Teacher Laptops:**

In 2014-15, the District leased a MacBook laptop computer for every certificated teacher. The District opted to lease teacher laptops to ensure that teachers are supported with current technology. Additionally, newly hired certificated staff members are provided an Apple laptop and receive training for expanded technology use. Teachers use their District provided laptop for daily record keeping and online attendance, email communication, and the updating of class assignments and information on their class website.

The District also supports the entire staff with technical assistance provided by the District Technology Department.

**Special Education:**

Currently, technology is used throughout the Special Education Department for data management and instructional support. Special Education staff use a web-based IEP management program for individualized education plan (IEP) development and service logs. The Internet is used for correspondence with other professionals in the District and for communication with parents and families, as is a web-based communication program. Within the IEP process and mandate, all Special Education students have assistive technology considered for educational support according to their IEP.

**Description of the district's current use of hardware and software to support teaching and learning****Hardware:**

Del Mar Union School District has made a serious commitment to provide technology hardware and software. The purpose of hardware and software in District classrooms is to provide opportunities for students to support 21<sup>st</sup> Century learning. Students have access to computing and technology experiences at least once daily, and use technology for learning throughout the day at the upper grades.

Teachers and administrators use a variety of technology tools for productivity, teaching, and learning. The most common uses for both teachers and administrators are communicating with colleagues and parents via email, creating instructional materials, and providing instruction with the use of technology. As stated previously, all schools have at least one Technology Lab furnished with 30 Macintosh desktop computers. Printers are available either in classrooms or school site wings via a local area network, and there are currently approximately 300 network printers across the district. Peripheral equipment available at various schools includes: television monitors, teacher iPads, Apple TV's, Chromecasts, video recorders, digital cameras, scanners, LCD projectors with speakers, and document cameras.

**Software:**

All Del Mar Union School District computers and mobile devices are licensed with the appropriate operating system, *Microsoft Office*, and the multimedia *iLife suite (iMovie, iPhoto, iTunes and GarageBand)*. Many teachers use media design and educational software such as *KidPix and Pixie* to enhance their curriculum. Teachers use *Illuminate*, our Student Information and Data System to maintain learning data and assessment records,

analyze data, compute grades, track student progress, and communicate progress to students and parents. Teachers and students use a variety of on-line tools, as well. The most widely used on-line applications are those in *Google Apps for Education*. In addition, teachers use *Haiku Learning*, *Brain-Pop*, *Discovery Education*, and *Dreambox*.

A variety of enrichment software is used by all kindergarten through sixth grade students for repetition and reinforcement to strengthen skills. This courseware is integrated into the core curriculum and used by teachers and students on a daily basis.

### **Internet Safety:**

The Del Mar Union School District Technology Plan addresses Internet safety and the appropriate and ethical use of information and technology. All students must complete and sign a Technology Use Form in compliance with District Board Policy No. 6163.4 “Student Use of Technology” which details how technology is to be used. Board Policy No 6163.4 and the associated Administrative Regulation were updated in May of 2016, and a new Acceptable Use Agreement was created and added as an attachment to this Board Policy. All students are limited to web browser access by parental signature of approval and only for use under the direct supervision of certificated staff. All District computers have web browser home pages that are set to open to the district-created homepage or our in-house created student start page. All Internet traffic is protected by the use of a firewall and a web filter. All websites are filtered for inappropriate content to insure Internet safety.

The District also provides Parent Information Nights on Internet Safety and/or Digital Citizenship led by local and regional experts and is developing a set of digital citizenship lessons for each grade level to be taught in the general education classroom.

### **Current Technology Use:**

In the last three years, Del Mar Schools have made tremendous gains in the integration of technology into classrooms and across content areas. Lessons are designed and delivered with a focus on integrating technology in all third through sixth grade classes, and as kindergarten through second grade classes have been provided small sets of iPads during the 2014-2015 and 2015-2016 school years, technology integration has begun to increase in our primary grades.

The Del Mar Union School District continues to focus on technology as a tool to be embedded within instruction to transform learning based on a steadfast focus on meeting or exceeding our state standards. Technology is not viewed as an end goal of it’s own, rather, the focus is on how technology can improve student learning and prepare our students as thinkers and learners who will be successful in middle school, high school, and beyond. Teachers continually increase their use and integration of technology as they gain greater comfort and expertise with the devices, software, and applications at their disposal. This puts our district in a timely position to support the use of technology to transform lessons and units so that students are given choices in how they demonstrate learning, provided access to resources and opportunities for first-person interactions around the world, and have increased opportunities to use technology to consume, vet, analyze, and synthesize content in order to create their own meaning and share this with others – this is the thinking and work of the 21<sup>st</sup> Century.

The Del Mar Union School District Technology Plan is being put in place to support the work of our District’s Strategic Plan. The Technology Plan supports each of our Strategic Plan Core Strategies, but most directly supports the following five Core Strategies:

- Core Strategy #1, Instructional Program
- Core Strategy #2, Technology
- Core Strategy #3, Professional Learning
- Core Strategy #4, Communication
- Core Strategy #8, Student Safety and Well-being

## Technology Plan Vision and Instructional Program Goals

### Vision for Technology

Technology facilitates the purposeful integration of learning between subjects, throughout the day, and across the school site in order to individualize learning and allow for student choice. Through training and regular use of technology staff are experts in ensuring that the right technology tool is used to provide our students with opportunities to learn and share knowledge that would otherwise be unimaginable. A culture is clearly established around the willingness to embrace new ideas and proactively use technology by continually infusing local and global best practices, current trends, and future projections into all conversations about teaching and learning.

### Goals

The goals below support the Vision for Technology. These goals begin with an exit goal that states what we expect sixth grade students leaving our district to know and be able to do and is followed by goals for students and staff that will support learning in our classes and our overall instructional program. These goals are intended to guide the implementation of technology across the Del Mar Union School District and support the transformational use of technology to expand learning beyond our walls and ensure that our students are fearlessly using technology to find, assess, analyze, and synthesize information in order to share their learning in novel, purposeful ways that enhance their message.

<b>Exit Goal</b>	Del Mar Union School District students in grade six will adeptly choose the right tool for a variety of learning tasks in order to both consume and produce information appropriate to their learning goal, allowing students choice and individuality in their final demonstration of learning. Students will develop strong digital citizenship skills with respect to interpersonal behavior as well as plagiarism and copyright law and will be skilled in computer hardware/software skills.
By June 30, 2019, all exiting sixth grade students will:	
Use current application software (including word processing, publishing, spreadsheet, database, multimedia, and presentation software) as well as web-based applications to demonstrate learning in ways that fit both content and audience.	
Create an ePortfolio of work completed each year that will demonstrate growth and learning.	
Develop an understanding of the uses for a variety of devices and will be able to choose the best device to use for a variety of jobs.	
Access and download media from the internet, reference it appropriately, and incorporate it into presentations.	
Effectively use the internet to search, analyze, use, and cite information.	

Develop a strong understanding of what good digital citizenship entails and will practice good digital citizenship in all settings.
Save and access files to a cloud storage service such as <i>Google Docs</i> .
Develop understanding of computer hardware and software.

<b>Goal #1</b>	Students will integrate technology into all content areas to increase achievement in California State Standards.
By June 30, 2019, Del Mar students will:	
Intentionally access a variety of resources in order to actively find information to solve problems, answer questions, and further their understanding both on their own and with support from staff.	
Choose to create and share information through formats appropriate to the purpose and audience for the assignment – to include written work, video, presentation, blogs, or other formats that best fit the assignment.	
Use technology to reinforce and extend learning in all curricular areas.	
Use standards-based software and web-based resources for extension and/or remediation to meet individual needs.	
Use multi-media to transform their sharing and presentation of learning. This may include the use of iPads, iMovie, or other multimedia creation tools that provide opportunities for students to create multimedia content.	

<b>Goal #2</b>	Teachers will incorporate technology into teaching of all content areas to increase student achievement in the California Content Standards.
By June 30, 2019, Del Mar teachers will:	
Actively use the SAMR model as a tool for thinking about the purposeful integration of technology when planning lessons and units of instruction.	
Deliver lessons and units of instruction that intentionally integrate technology to further learning, student choice, and access to resources.	
Use technology as a tool to enhance collaboration in order to share lessons and best practices, to include sharing between: <ul style="list-style-type: none"> <li>• STEAM+ and classroom teachers,</li> <li>• Classroom teacher and classroom teacher,</li> <li>• And, teachers sharing at different grade levels and/or sites.</li> </ul>	
Use multi-media to transform lessons and presentations. This may include the use of iPads, iMovie, or other multimedia creation tools that provide opportunities for students to create multimedia content.	
Use an online learning management system to plan, develop, and deliver lessons.	
Use resources to provide first-person learning experiences through technology. This may include virtual field trips, videoconferences, and/or virtual reality.	
Technology Specialists and classroom teachers will work collaboratively to plan for the integration of technology into learning experiences focusing on using the right tool at the right time.	

<b>Goal #3</b>	Students will learn about and understand issues related to the appropriate and ethical use of information technology, leading to the development of good digital citizenship habits.
By June 30, 2019, students will:	

Use appropriate research and citation practices to avoid plagiarism.
Learn to model acceptable computer etiquette and how to respect published documents on the Internet.
Learn to distinguish between lawful and unlawful downloading and peer-to-peer file sharing, including the consequences and costs.
Learn to recognize how copyright affects technology systems, information and software resources.
Recognize how world wide web users are affected as it relates to privacy and security.
Understand and discuss basic issues related to the responsible use of technology information and define acceptable and unacceptable computer use.
Learn about digital citizenship in their general education classroom at each grade level based on a district-developed sequence of provided lessons.

<b>Goal #4</b>	Access to technology is available to all students, including Special Education, English Language Learners, and underachieving students.
By June 30, 2019, students will:	
Have access to technology in all subjects and in all classrooms and alternative locations where instruction occurs.	
Have access to specialized technology needed for students with special needs based on support from our SELPA and NCCSE.	
Have access to district English Learner software and/or applications for learning.	

<b>Goal #5</b>	Teachers and administrators will use technology to collect and access student data for the purpose of guiding and improving instruction to meet the needs of all students.
By June 30, 2019, teachers and administrators will:	
Use Illuminate’s student information system to analyze trends in recorded data and determine next steps for individuals, groups, and classes of students.	
Develop individualized learning goals through their data analysis.	
Use student data collected and organized in Illuminate to make collaborative instructional decisions during Professional Learning Communities.	
Use information collected and stored through web-based applications such as Dreambox to inform and guide instructional decisions.	

<b>Goal #6</b>	Staff will model the effective use of technology during district professional learning, site Professional Learning Communities, and Staff Meetings.
By June 30, 2019:	
Principals and district learning leaders will regularly incorporate district-adopted technology into professional learning and staff meetings.	
Staff will share information and engage in professional learning through purposeful use of Haiku Learning Management System and Google Drive to share information and engage in professional discussions, as well as to build lessons and units of instruction.	
Teachers will use the data collected and shared through Illuminate to determine next steps and plan lessons and units of instruction.	
Professional Learning Communities will use Haiku and Google Drive to collaborate and share lessons and units of instruction.	

<b>Goal #7</b>	Build strong school/home/community relations through the use of technology.
By June 30, 2019:	
All Del Mar Union School District schools and the district office will regularly use Facebook and Twitter to proactively communicate with the school community.	
The standard for contents on the District web page, school web pages, and a teachers' web pages will be regularly reviewed, updated, and shared.	
Community information sessions on pertinent, timely technology-related issues will be held annually.	
Digital citizenship information and training will be shared with parents.	

## IV. Professional Learning

### Goals for providing professional learning opportunities based on the Instructional Program goals in this plan

The focus of the professional learning goals below is to support the implementation of the goals and success measures listed in the Instructional Program section of this plan. The Del Mar Union School District prioritizes professional learning and understands that focused goals based on the needs of our teachers and students and aligned with our Strategic Plan are necessary to ensure that technology is used to transform learning in the classroom. Feedback regarding professional learning needs is an ongoing process and has been gathered from all stakeholders listed in this plan, the use of the national Speak Up Survey, and informal discussions with staff at each site across the District. Speak Up Survey information regarding teacher technology skills and desired professional learning formats is listed below.

#### Speak Up Survey (2015) Teacher Results

**How would you rate your technology skills?**

Response	# of Responses	% of Responses	National %
Advanced - My skills are more advanced than most adults I know	24	28%	31%
Average - My skills are similar to those of the adults I know	61	70%	65%
Beginner - I'm just learning to use technology tools	2	2%	4%

**Which of these types of professional development formats do you think are most effective to help teachers learn how to integrate technology within instruction in their classroom? (Check all that apply)**

Response	# of Responses	% of Responses	National %
Blended learning or flipped learning type courses	19	27%	29%
Earning micro credentials or digital badges	4	6%	6%
EdCamps (an informal, teacher-only collaborative learning event)	10	14%	17%
Face to face conferences with expert presenters	33	46%	43%
In school peer coaching and mentoring	26	37%	51%
In-service school or district training days	34	48%	52%
Observations of other teachers	38	54%	48%
Online courses	14	20%	22%

Online professional learning communities	14	20%	16%
Online tutorials	23	32%	33%
Online videos	23	32%	35%
Online webinars or virtual conferences	11	15%	19%
School based professional learning communities	22	31%	27%
Summer institutes	19	27%	23%
Teacher led trainings	29	41%	43%
Training provided by students	2	3%	8%
Twitter and other social media vehicles	0	0%	5%
University courses	8	11%	11%
Virtual coaching and mentoring	9	13%	9%
Watching Ted Talks or other online videos	20	28%	18%

Because we know that different skills and needs can be addressed in different ways, a combination of face-to-face learning, remote video conferencing, self-paced online learning, and online resource libraries will be developed to meet the needs of all adult learners in the Del Mar Union School District.

<b>Goal #8</b>	Provide training to teachers to improve technology proficiency and use in all district applications, including Google Apps for Education and Haiku Learning Management.
By June 30, 2019, teachers will:	
Skillfully use Google Apps for Education (Drive, Docs, Sheets, Forms, Maps) to enhance learning opportunities. Trainings and help guides will be available to all teachers. Training will be provided to all teachers new to the district.	
Skillfully use Haiku Learning Management System to build and deliver lessons. Training will be provided to all teachers.	
Be able to access training through a variety of formats, to include a combination of the following: face-to-face, online live trainings, self-paced online learning, and online resources.	

<b>Goal #9</b>	Provide training to teachers to integrate technology into the curriculum.
By June 30, 2019, teachers will:	
Engage in learning opportunities that develop an understanding of the SAMR model in order to support their planning of transformative lessons and units.	
Be given access to model examples of rich, collaborative, relevant standards-based learning opportunities that purposefully infuse technology.	
Receive ongoing training and resources for the integration of technology into the curriculum.	
Have opportunities to learn how to use multimedia resources to deliver instruction and provide opportunities for students to demonstrate learning in a variety of ways. This may include iMovie, web-based applications, and/or iPad apps.	
Help to identify further areas of need, district experts in these areas will be identified, and a structured collaboration model will provide a means for sharing this expertise.	

<b>Goal #10</b>	Provide training to teachers to utilize lessons that promote good digital citizenship.
Teachers will be given an overview of grade level digital citizenship lessons, as well as time to review lessons and plan for instruction.	
Lessons for each grade level will be curated and shared through Haiku Learning Management System.	
Teachers will receive training to teach safety issues related to Internet use, including <ul style="list-style-type: none"> <li>• respect for published documents on the Internet;</li> <li>• the importance of using appropriate citation practices to avoid plagiarism;</li> <li>• safe, legal, and responsible use of technology;</li> <li>• and how to recognize how copyright affects technology systems, information and software resources.</li> </ul>	

<b>Goal #11</b>	Provide training to administrators to improve technology proficiency and use in order to support modeling of technology use and the use of data to guide instructional decisions.
By June 30, 2019:	
Administrators will use Haiku, Google Docs, and/or other technology resources during professional learning with their staff. To accomplish this, administrators will be trained in Haiku, Google Docs, and other technology resources as needed on an ongoing basis.	
Administrators will use data from Illuminate Student Information System to work with grade level teams, analyze trends, and support instructional decisions. To accomplish this, administrators will be trained to utilize Illuminate in order to manipulate and analyze data as a tool for assessing student learning and planning instructional steps with teachers.	
Administrators will be trained to use and implement current technology to provide improved communication between school, home, and community.	
Administrators will receive ongoing training to enhance and support technology standards with a special focus on the transformative use of technology through the SAMR model.	

<b>Professional Development Considerations for Technology Integration</b>	
Continue to use the Director of Technology and Technology Specialists to support staff by modeling classroom applications.	
Provide training to the Technology Team and teachers/staff to utilize the SAMR model for technology integration.	
Utilize presentation tools that allow for remote learning to expand learning opportunities for teachers.	
Provide training for administrators to aide in the support of their staff, to include web resources and trainings.	
Expand professional learning opportunities to address different teacher learning styles including strengths and weaknesses by providing a variety of professional learning modalities, such as face-to-face, remote learning, self-paced learning, and accessible learning resources.	
Develop incentives to encourage staff to participate in training opportunities.	

# V. Infrastructure, Hardware, Technical Support and Software

## Existing Infrastructure, Hardware, Technical Support and Software

Del Mar Union School District has made a substantial commitment to technology in the classroom. We currently have a District wide data network in place with over 4000 network clients connected either by Ethernet or by Wireless Access Point. This investment in infrastructure and equipment is in a constant state of renewal, in that as we purchase new equipment our existing equipment is refurbished and reassigned to an appropriate location. This helps us target needs across our district and ensure that we are maximizing the value of our equipment.

The current wide-area data network is AT&T Switched Ethernet Fiber from AT&T, in a hub and spoke pattern, with the hub located at Ashley Falls School. From the main hub, each of the other school sites and District Office are connected by a Fiber Optic Metro Ethernet Link at 100Mbps CIR (Committed Information Rate) with plans to increase the Metro Ethernet Link to 250Mbps CIR to each school site and the District Office. The central hub location is further connected to our County Office of Education via a point-to-point 1000Mbps CIR. All central network equipment is powered through uninterruptible power supply equipment.

All eight elementary schools are equipped with multiple devices in all classrooms. In 2015-2016 all schools received 30 iMac computers for the Technology Lab. The District has made a commitment to lease an entire new lab of 30 computers every 4 years and as a result of the lease buy-out of \$1.00, it allows the lab computers to be rotated into classrooms when the lease comes to an end. All replaced iMacs were moved to the highest need areas within the school in order to best support student learning. All classrooms are connected through wired Ethernet switching technology with from 2 to 8 network ports. In addition, all school sites are completely covered by 802.11 Cisco wireless networking managed by a Cisco wireless controller. This data network infrastructure provides all students and teachers access to a variety of information resources including Internet access, email, *Illuminate Student Information System*, data systems, *Google Apps*, *Haiku Learning Management System*, a variety of on-line resources, video conferencing, and District administrative functions.

Available software components supported by the District include:

- *Microsoft Office*
- *Google Apps*
- *Brain-Pop*
- *Discovery Education*
- *Haiku Learning Management System*

Six full time Information Technology staff members provide a full range of technical support for teachers and administrative staff. These include an Administrative Assistant, an IT Data Communications Analyst, an IT Operations Coordinator, a Network Systems Technician, a Senior Programmer Analyst, and the Director of Technology. The team uses a variety of tools to support their work including: *Tools4Ever UMRA*; *Lightspeed*; *SolarWinds*; and a variety of Cisco on-line tools. This entire six-person team is on hand to provide telephone, email and direct contact support for the Educational Technology Goals of the District.

In addition, Del Mar Union School District has implemented a help desk system for technical support across the district. During the 2015-2016 school year, the technology department responded to nearly 2,500 recorded help desk tickets, along with many unrecorded instances of support, and deployed over 760 devices to schools.

Since the beginning of the 2010-2011 school year, all newly hired certificated teachers have been provided an Apple laptop for use in class and as a resource for planning and delivering lessons, communicating with all stakeholders to their students' success, and a variety of other uses to support learning. In 2014-2015, the District refreshed this lease, providing a new Apple laptop to each certificated full time employee, and in 2018-2019, the District will plan to do another refresh of these important teacher tools.

Part of our vision includes researching new ways to improve our professional development and communication with tools such as distance learning, video conferencing, online education, and blogging. Depending on the content, professional learning can be provided in a variety of formats, to include face-to-face, remote video conferencing, online self-paced learning, and online resource libraries. We will be exploring the best combination of these resources to meet the needs of all of our adult learners.

Del Mar Union School District has found significant value in the use of media presentation technology. Our goal is to identify resources so that all classrooms can use iPads, Apple TV's, and large screen monitors for the display of student work and projects, and teacher led lessons. As outdated projectors and document cameras begin to fail, resources should be identified to replace these outdated projection systems with the iPad, Apple TV, and monitor.

Maintaining the present level of technology support will be a crucial component in achieving the goals of this plan. As hardware and software use increases, the Director of Technology will review support levels and future needs and communicate these needs to the Superintendent. In the previous Technology Plan, it was anticipated that as inventory and usage increased there would be a need for further technical support that would lead to the creation of new positions. Through a streamlined help desk process and cross-training of employees, the Technology Department has not added any positions at this time.

**Goals for monitoring and obtaining the hardware, infrastructure, learning resources and technical support required to support the other components of this plan**

**INFRASTRUCTURE**

Upgrade infrastructure to meet site and district needs.
Review bandwidth usage regularly and determine annually if bandwidth needs to be increased in order to meet site and district needs.
Expand video broadcasting capabilities to support distance learning and remote learning within our district.

**LEARNING RESOURCES**

Integrate technology into each classroom and each curricular area.
Review bandwidth usage regularly and expand bandwidth to meet site and district needs.
Expand video broadcasting capabilities to support distance learning and remote learning within our district.

**HARDWARE**

Maintain and upgrade technology resources in a timely and cost-effective manner.
As LCD projectors and document cameras reach end of life, replace with 80-inch monitors, Apple TV's, and iPads.
Continue to lease teacher laptops on a four-year cycle.
Continue leases for Technology Labs and desktop computers as needed.
Research and implement video conferencing best practices to allow for remote learning.
Monitor and improve security procedures for district hardware.
Monitor and facilitate replacement of obsolete hardware.

**TECHNICAL SUPPORT**

Maintain present levels of technology support.
Monitor and review technology support through help desk to determine process and/or personnel needs.
Cross-train staff so that multiple employees are able to respond to all district support needs.
Maintain systems for support, ordering, and record keeping.

# VI. Funding and Budget

## District Funding

The Del Mar Union School District depends on the local economy and property taxes to fund the District’s budgets. Based on the District’s Strategic Plan goals, each site principal works with all interested stakeholders (students, parents, staff, community, School Site Council, Parent Teacher Association, etc.) to determine how site monies are used to improve instruction and student achievement of all curricular standards.

## Estimate of annual implementation costs beyond ongoing expenditures for the term of the plan

The current adopted 2015-2016 budget is displayed below. The second chart describes new projects proposed to support the implementation of this plan on a year-by-year basis along with projected costs.

## Current District Technology Budget for 2015 – 2016

Major Object of Expenditure	School District General Fund
<b>1000-1999</b> Certificated Personnel Salaries	\$133,433
<b>2000-2999</b> Classified Personnel Salaries	\$357,653
<b>3000-3999</b> Employee Benefits	\$144,942
<b>4000-4999</b> Books and Supplies	\$45,200
<b>5000-5999</b> Services and Other Operating Expenditures	\$190,300
<b>6000-6999</b> Capital Outlay	\$128,499
<b>Total Funds</b>	\$1,000,027

Year	Proposed New Projects/ Expenditures	Estimated Cost for Proposed Projects/ Expenditures
2016-2017	<ol style="list-style-type: none"> <li>1. Chromebook Refresh</li> <li>2. iPad Implementation</li> <li>3. 5<sup>th</sup> Grade TV's</li> </ol>	<ol style="list-style-type: none"> <li>1. \$190,000</li> <li>2. \$80,000</li> <li>3. \$115,000</li> </ol>
2017-2018	<ol style="list-style-type: none"> <li>1. Chromebook Refresh</li> <li>2. iPad Implementation</li> <li>3. 4th Grade TV's</li> <li>4. Switch Refresh <ul style="list-style-type: none"> <li>• Del Mar Hills</li> <li>• Carmel Del Mar</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>1. \$190,000</li> <li>2. \$80,000</li> <li>3. \$115,000</li> <li>4. \$175,000</li> </ol>
2018-2019	<ol style="list-style-type: none"> <li>1. Chromebook Refresh</li> <li>2. 3<sup>rd</sup> Grade TV's</li> <li>3. Begin new teacher laptop lease</li> </ol>	<ol style="list-style-type: none"> <li>1. \$190,000</li> <li>2. \$130,000</li> <li>3. Continue in budget</li> </ol>

# VII. Monitoring and Evaluation

## **Process for monitoring, evaluating, and communicating progress**

The Director of Technology will be responsible for initiating the implementation of the Educational Technology Plan. Success indicators, as identified in the goals in the above sections (Instructional Program; Professional Learning; Infrastructure, Hardware, Technical Support, and Software; and Funding and Budget) will be monitored and evaluated through the Del Mar Union School District Strategic Management Process. Annual Priority Actions will be developed, acted upon, reviewed, and updated. At annual strategic planning meetings, the strategic planning team will be informed of progress on Priority Actions and support the development of new Priority Actions for the following year. The Director of Technology will be responsible for evaluating progress toward Priority Actions on a quarterly basis with the support of the District Leadership Team. In addition, a report on infrastructure and classroom impact will be made to the School Board on an annual basis.

When the District enacts a new Strategic Plan, the Technology Plan will become part of the Strategic Plan and the Technology Plan will continue to be monitored, evaluated, and updated through the implementation of the new Strategic Plan.

## VIII. Research-Based Resources

Del Mar Union School District's educational technology strategies are based on relevant research and effective practices in the areas of student learning, achievement, and assessment; professional development; and technology management. The technology focus in the Del Mar Union School District includes the complete integration of technology into all core content standards. Relevant research supports the curricular and professional development goals and objectives of the Del Mar Union School District, which are also based on California Content Standards and National Education Technology Standards.

Major resources used for educational research in the development of the Technology Plan include:

- The International Society for Technology in Education (ISTE) <http://www.iste.org/>
- Technology Information Center for Administrative Leadership (TICAL); <http://www.portical.org/>
- Future Ready Schools and the Future Ready Dashboard; <http://futureready.org/>
- *The National Education Technology Plan* by the U.S. Department of Education found at <http://tech.ed.gov/netp/>
- *Speak Up* – Project Tomorrow <http://www.tomorrow.org/speakup>