



## CHAPTER 1

# VISION

Pioneers of Today. Leaders of Tomorrow.

*"Education is the most powerful weapon which you can use to change the world." - Nelson Mandela*



Students collaborating on a digital photography project.

## OVERVIEW

Imagine a school where learning is hands-on, engaging, creative, and fun. Traditional education is replaced with meaningful, integrated learning experiences. No longer do students sit passively consuming content as teachers deliver direct instruction. Instead, students, teachers, and administrators actively participate in developing the educational pathway.

Passions, creativity, choice, and innovation all play a key part in developing the school culture. Being stagnate is not an option. In a rapidly changing world, students and staff must be flexible and willing to adapt. With one-to-one Apple iPad devices in the hands of all learners, students and teachers have the power to access knowl-

edge, demonstrate creativity, and feel a sense of purpose right at their fingertips.

Welcome to a unique elementary school named [Olivenhain Pioneer Elementary](#) serving almost 600 students in Kindergarten through sixth grade. As a school in the Encinitas Union School District, we sit atop a cozy hill in a small corner of Carlsbad, California, yet our school vision makes a big impact on our community. We embrace a S.T.R.E.A.M. philosophy where Science, Technology, Research, Engineering, Art, and Mathematics are blended to bring authentic learning experiences to our school.



Fifth Grade students learn ukulele in music class.



## VISION

Key Role of Stakeholders

Goals and Sustainability

## VISION

**“Teaching is more than imparting knowledge, it is inspiring change. Learning is more than absorbing facts, it is acquiring understanding.” - William Arthur Ward**

Welcome to Olivenhain Pioneer Elementary School, a place where creativity and innovation are encouraged, critical thinking and problem-solving skills are developed, and engaging learning opportunities are ubiquitous.



Our S.T.R.E.A.M. emphasis is designed to develop an interdisciplinary approach to learning by integrating Science, Technology, Research, Engineering, Art and Mathematics throughout our standards-based curriculum. In this environment, subjects are not taught in isolation, instead, concepts are questioned, researched, designed and explored through cross-curricular collaboration.

As an Apple Distinguished School, we strive to be in constant innovation using our digital devices. Our new story and vision focus on digital

creativity tools and how they impact student attitudes toward learning.

At OPE we strive to develop the whole child and we believe that lifelong learning begins with creative thinkers and problem-solvers. Our new book highlights our journey to incorporate more digital creativity, deeper connections through integration, and blending hands-on experiences with digital communication.

When you step onto our campus, you will experience a friendly atmosphere, a strong sense of community, and positive student en-

### MOVIE 1.1 Vision and Continued Innovation



Olivenhain Pioneer Principal, Dr. Beth Cameron shares OPE's journey since becoming an Apple Distinguished School.

ergy. We recently started a research project with Apple that investigates how digital creativity tools affects student attitudes toward learning. Learn more about our [Research Project](#) in the Results Section of our story.

Last year, we launched Apple's **Everyone Can Create** Curriculum school-wide. We believe that giving students a choice and a voice in what they study increases their desire to learn. When students are excited about their school experiences they make more meaningful connections to the content. Even though we are still in the middle of our active research, we have observed an increase in the creation of original content.

## PERSONALIZED LEARNING THROUGH DIGITAL ACCESS

Encinitas Union School District (EUSD) believes that **"what matters to you, matters at school!"** through purpose, passion, power, and play.

Through this philosophy, the district enables students to follow their interests through 1:1 digital access. All students are issued a district-owned iPad that connects them with a rich digital curriculum.

As students develop an interest in subjects that are not part of the standard curriculum, they use information literacy skills to discover vocabulary unique to the topic under study and are challenged to make connections with the core content areas.

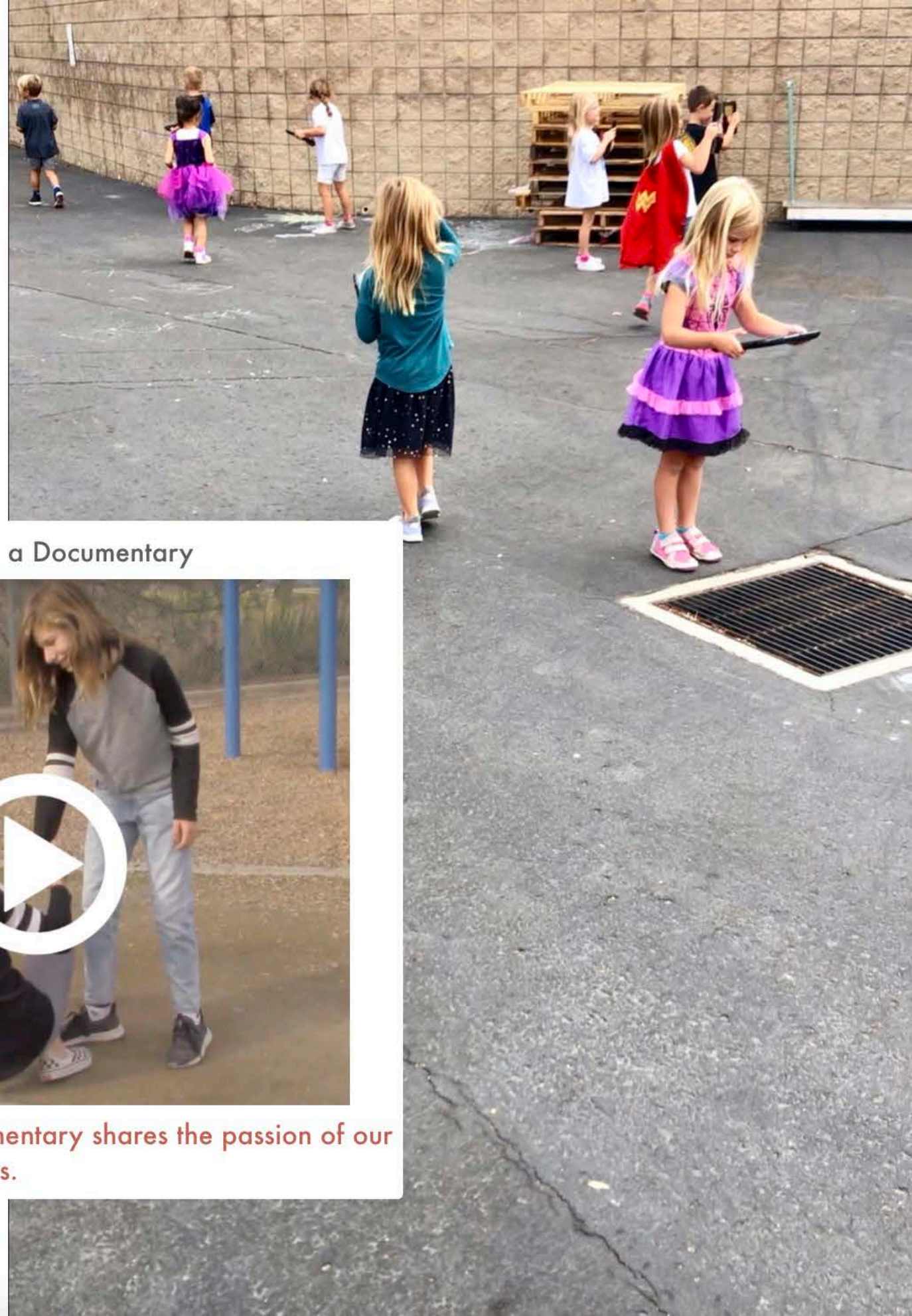
## KEY ROLE OF STAKEHOLDERS

Partnerships within the community enrich the learning opportunities for EUSD students even further. The support and engagement from the community are critical components of transformational change.

Through a shared vision, the Principal, School Site Council (SSC), Parent Teacher Association (PTA), and Encinitas Educational Foundation (EEF) work together to ensure the success of our school's vision. Our Encinitas Educational Foundation (EEF) helps to financially support the hiring of our various enrichment teachers.

## EQUIPPING STUDENTS TO BE LEADERS

Students learn that leadership is not a position, but rather someone who is a change agent. As a result, Olivenhain Pioneer has leadership programs that include opportunities like the [STAR TECH program](#) and the Kindness Crew. There is also an environmental leadership program in which students conduct research and make recommendations to the school board on a variety of issues, including water conservation, healthy eating, and alternative forms of energy. The students believe that they can make a difference in this world because they already have.



### MOVIE 1.2 Kindness Crew: a Documentary



**This student-created documentary shares the passion of our students to spread kindness.**



Students working on a Sixth-Grade film project.

## GOALS AND SUSTAINABILITY PLANS

This is our 7th year with 1-to-1 iPads. Each year the iPads become more and more integrated into the learning environment.

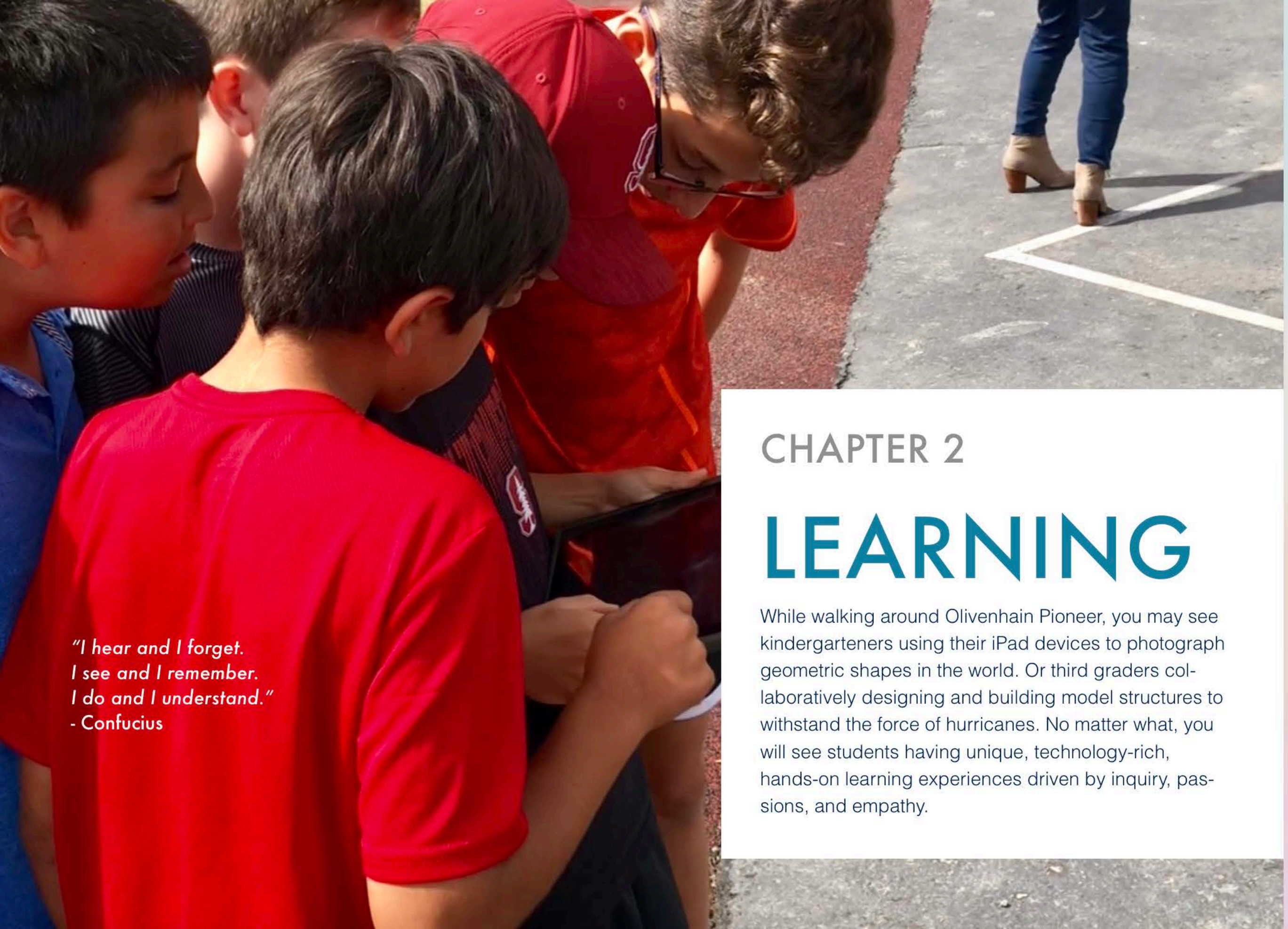
However, over the past two years, one of the most important goals of using iPad devices is that students have a digital tool to innovate and create. Consumption of information becomes less important as students learn to create and share the content in ways that resonate with them. Instead of traditional paper and pencil tests or out-dated worksheets, students now have an opportunity to demonstrate their learning using a variety of digital media. For the continued sustainability of our school vision, we have implemented a variety of tools.

*Double click the images to learn more about our sustainability plans.*

### INTERACTIVE 1.1 OPE Sustainability Plans



Double click the images to learn more.

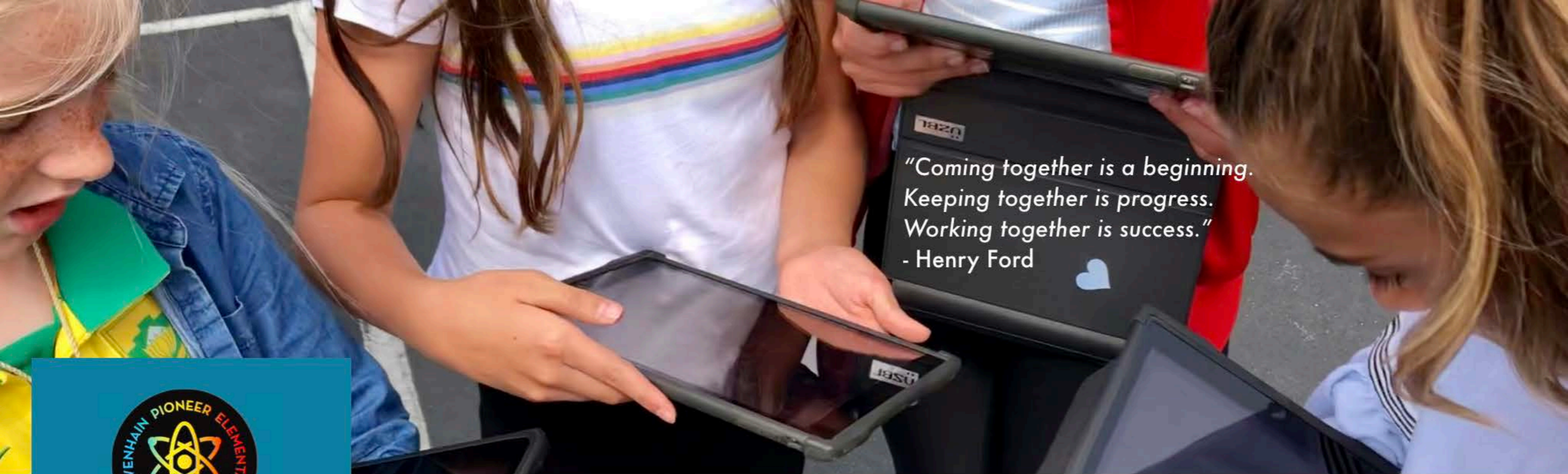
A group of students, mostly wearing red shirts, are gathered outdoors on a paved surface. They are looking down at a tablet held by one of the students. In the background, a person's legs and feet are visible, standing on a white geometric shape painted on the pavement. The scene is brightly lit, suggesting a sunny day.

*"I hear and I forget.  
I see and I remember.  
I do and I understand."*  
- Confucius

## CHAPTER 2

# LEARNING

While walking around Olivenhain Pioneer, you may see kindergarteners using their iPad devices to photograph geometric shapes in the world. Or third graders collaboratively designing and building model structures to withstand the force of hurricanes. No matter what, you will see students having unique, technology-rich, hands-on learning experiences driven by inquiry, passions, and empathy.



"Coming together is a beginning.  
Keeping together is progress.  
Working together is success."  
- Henry Ford



## LEARNING

[Teamwork and Communication](#)

[Creation and Innovation](#)

[Personalization of Learning](#)

[Critical Thinking](#)

[Real World Engagement](#)

## TEAMWORK AND COMMUNICATION

**"Coming together is a beginning. Keeping together is progress. Working together is success." - Henry Ford**

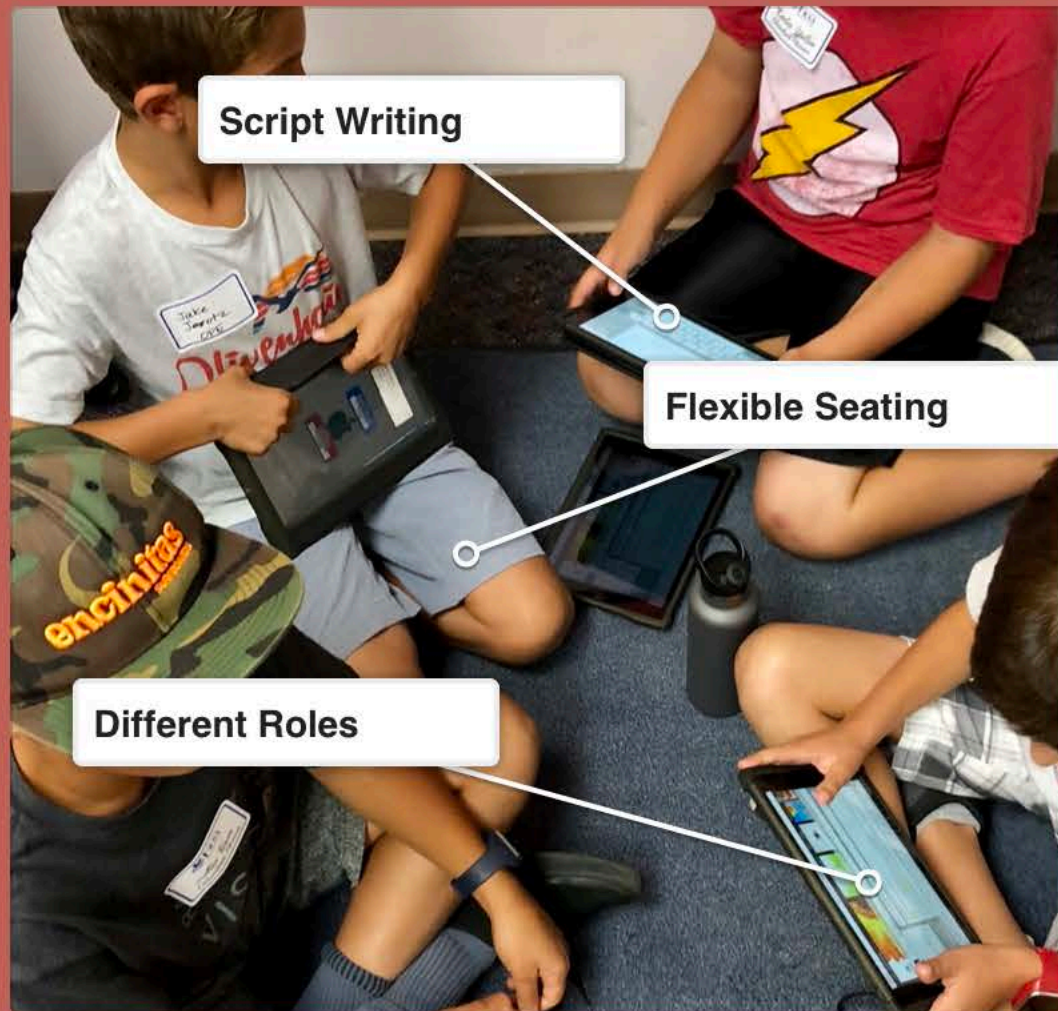
The beginning of our story starts with collaboration and communication. As Henry Ford explains, "Coming together is a beginning." Our culture at Olivenhain Pioneer is structured around teamwork. Walk into a classroom, pod, library, or courtyard, and you will see students grouped together. Three years ago we replaced all individual desks with tables to encourage more opportunities for peer collaboration.

Group work is an essential part of STREAM education. In order to be successful in the real world, students

must be flexible collaborators. We focus on developing collaboration and communication skills in our students through many group activities and projects.

Additionally, one-to-one iPad devices allow students to collaborate and communicate digitally. For example, Google Docs provides students with a collaborative document for writing and note-taking. Students are giving a variety of opportunities to engage in collaborative writing. iMovie script writing, group project note-taking, and Engineering Design Process Reflections are a few examples of students coming together to digital share ideas. This also means that when stu-

## INTERACTIVE 2.1 Film Guild Students Working Collaboratively



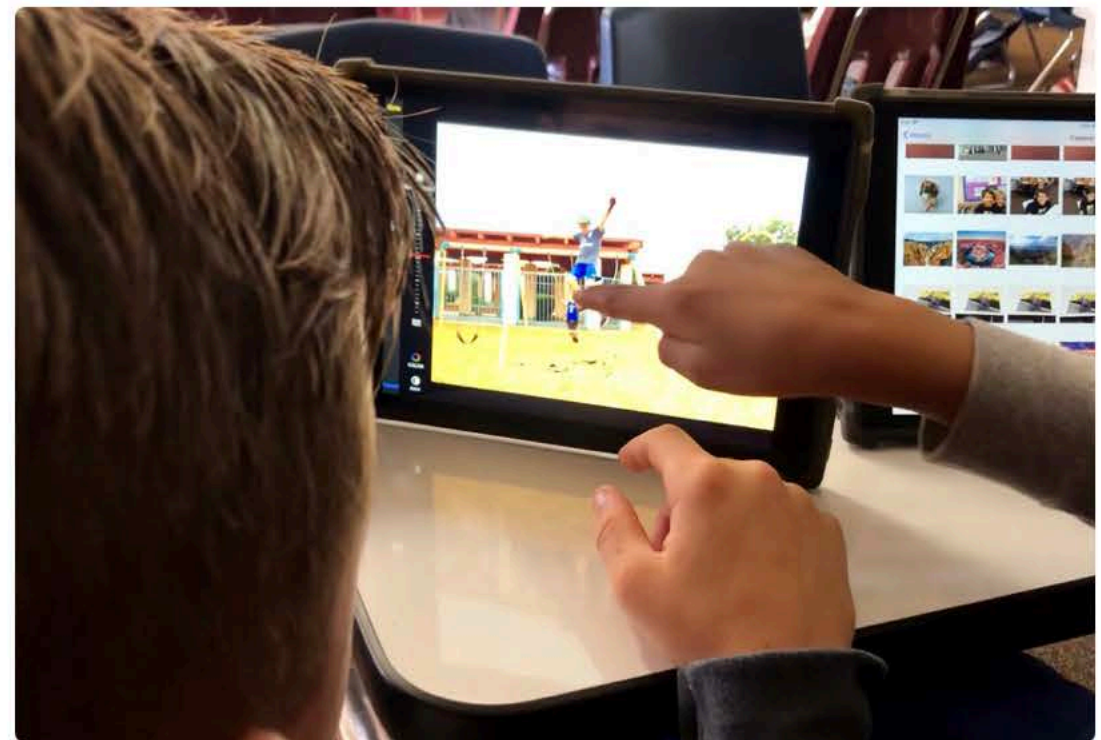
dents are working on a group activity they can access the work, even if a teammate is absent.

Furthermore, with the STREAM emphasis, students participate in many engineering design challenges. These are often group projects where teams must research, brainstorm, and prototype to-

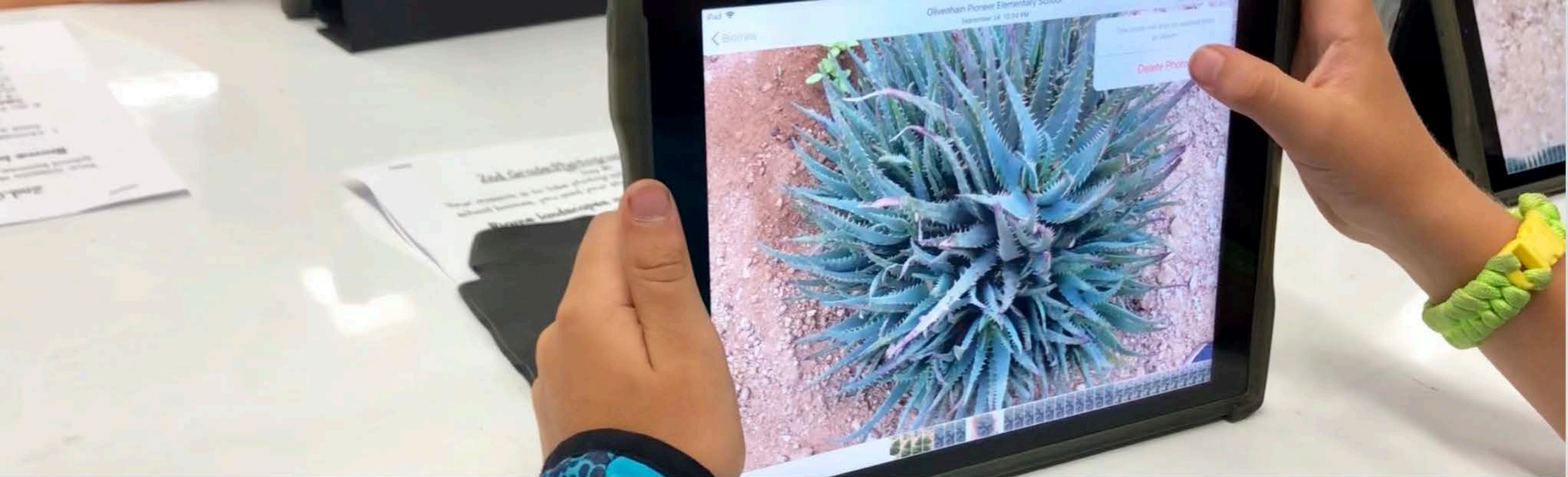
gether. Students collaborate using Hyperdocs on Google Slides to share ideas and information.

With our strong emphasis on creativity, we use the Everyone Can Create Curriculum by Apple as a guide to give students a choice in sharing their ideas and knowledge with others. This opens opportunities for students to communicate their ideas to an authentic audience that they may not have access to before. Students can choose to communicate through photography, video, music, or even drawing to share and spread their knowledge.

## GALLERY 2.1 Collaborative and creative learning with Apple Devices



Third-Grade Students learning about forces and motion on the playground use the camera and photo editing tools to collaboratively capture forces and motion in a still image.



## CREATION AND INNOVATION

**"Creativity is thinking up new things. Innovation is doing new things."  
— Theodore Levitt**

Additionally, access to digital devices opens up a new world of creativity and innovation. Students now can choose what kind of content they want to create. No longer are learners constrained to using paper and pencils to show their learning. We have moved beyond filling out worksheets to demonstrate knowledge and instead give students choice which empowers them to use their voice and promotes more creative thinking. The S.T.R.E.A.M. mindset blends logical and creative thinking resulting in more comprehensive learning.

### MOVIE 2.1 CAD Classroom (Creativity through Art and Design)



CAD incorporates digital and traditional creativity tools. Students use digital creativity tools such as Camera, Keynote, and Clips to create passion-rich digital projects.

## MOVIE 2.2 5th Grade Water Conservation PSA using Clips



Fifth-grade students created Public Service Announcements (PSAs) for water conservation. They used GarageBand to create original songs that reflected the mood of their PSA. Students used both the Clips app and iMovie app to produce their short films to spread awareness about their topic.

We have adopted Apple's Everyone Can Create Curriculum, so students and teachers are learning various ways that the iPad can be an effective tool for innovative creation. For example, fourth-grade students created films about the structure and functions of plants. They learned photography techniques and edited using the Photo app. They put the film together using the Clips video creation app.

Furthermore, using an iPad offers students the ability to extend their passions and interests. Now students have a tool at their fingertips with a variety of creative ways to display evidence of learning. When student interest is combined with integrated S.T.R.E.A.M. learning, divergent thinking occurs. With divergent thinking comes innovation and creativity. With the right tools, anything is possible.

First, students start with what they are required to learn (such as science and math concepts). Next they have a choice in how they access or research the information (find articles, watch videos, or listen to books) and how they creatively display their understanding of the concepts (create a movie, put together a multimedia presentation, write and produce a song, make a comic, design an infographic, or publish a story). Finally, students have access to a variety of technology tools to research, design, and create products. The final result is that students innovate and create something new.

No longer do students passively memorize information and regurgitate it in the same way through an essay or multiple choice test. Now students are challenged to truly understand new concepts and explain them in a way that is meaningful to the student.

## GALLERY 2.2 Creative technology offers deeper connections



This Fourth grade project using the Clips App demonstrates how students use photography and video creation to dive deeper into their science curriculum.



# PERSONALIZATION OF LEARNING

"Educating the mind without educating the heart is no education at all." - Aristotle

At Olivenhain Pioneer, passion-based learning is the vision that drives our school.

Peek into our Media Center and you may see our school Media Center Technician dressed in a wizard's cloak surrounded by a group of Harry Potter junkies with iPad devices making green

## GALLERY 2.3 Film Guild in Action



Film Guild Students work collaboratively to edit films about such topics as: Giving Students a Choice in Learning, Steven Spielberg, Spreading Kindness, and even a documentary on Film Guild.



screen videos about Quidditch. If you need tech-support, our STAR Tech students can be found wearing name badges and walking through classrooms to support teachers and students with many IT issues or teaching peers about how to use the apps.

Our future film directors, producers, and actors can be found writing scripts and making movies with our OPE Film Guild. Kindness is no longer limited to a week, but the Kindness Crew spreads kindness all year long.

**What matters to students, matters.** A large part of student success and passions is the ability for students to have choices. With the iPad, learning about high-interest topics is accessible. Now students have a tool that offers a variety of ways to share learning. clips, iMovie, Keynote, and Pages, are just a few apps students can choose from in order to demonstrate their learning. By giving students choice in what they learn and how they show it, provides students with a voice.

When students have a choice and a voice related to their learning, creativity is born. They are no longer being fed the same information and expected to recite it in the same manner. There is more freedom, creativity, and innovative thinking.

### MOVIE 2.3 Film Guild Movie Connected to Student Passions



Steven Spielberg inspired this young film-maker to create this award-winning film using iMovie.

Having a device in every students' hands increases the opportunity for student choice.

Students decide how they want to consume information through research. Whether listening to books, reading articles, or watching movies, students have access to a world of knowledge. The iPad makes research accessible to all learners (through text to speech, and the ability to listen to information). By using the iPad as a tool, students have the power to choose which resources work best for their individual learning styles.



## CRITICAL THINKING

“Because Fake News has Real World Consequences” (American Library Association) Having access to unlimited information online and an abundance of technology tools increases knowledge, but also means that students must learn digital citizenship. During Media Center class visits, they explore strategies for verifying sources, learn skills for safe and responsible online behavior, how to effectively search for online information, understand copyright and creative commons.

Students learn to navigate vetted databases for research, provided by both the school district subscriptions, as well as the public library. Students learn the importance of properly citing sources using an online citation generator, how to determine public domain images, and how to avoid plagiarism.

Additionally, learning at Olivenhain Pioneer supports the process over the product. As students engage S.T.R.E.A.M. learning they learn to persevere, be reflective, and use problem-solving skills. Through integrated learning and design thinking, students develop critical thinking skills and no longer assume they know the answers. Instead, students work through challenges and use mistakes to find new solutions.



## MOVIE 2.4 iPads for information Literacy and Digital Citizenship



Fifth Grade teacher, Anne Kolb, and Information Literacy Media Technician, Sue Foote, talk about why iPad devices are an important classroom tool for information literacy and digital citizenship.

Digital devices are a key component of critical thinking. First of all, the iPad is essential for researching current topics and students must learn how to identify quality sources. Before students can make judgments or create solutions they must build background knowledge about a topic.

Secondly, as students work through the process (whether a project or engineering design challenge) it is important for them to document their learning. Having visual documentation to review encourages deeper reflection which helps improve initial creation.

Students use the camera app to take pictures and capture videos which extends learning after an activity or hands-on lab are over. iPads further blur the lines between classroom learning and life learning.

iPads become a tool to document learning through journals and portfolios. Students now have evidence to refer back to during reflection. For example, a science experiment or engineering challenge can now be recorded to refer back to during a reflection.

## GALLERY 2.4 Extending Learning with digital tools



After completing a novel, this student chose to create an iMovie Trailer for the book.

## REAL WORLD ENGAGEMENT

*"Mistakes are proof that you're trying." - unknown*

Education loses purpose when it is confined to the walls of the school. Real world connections build a stronger foundation and sense of purpose when it comes to learning. At Olivenhain Pioneer, we strive to answer the question, "How does this relate to the real world?" before it is even asked.

For instance, kindergartners study shapes and geometry by walking around campus taking photographs, second graders study patterns through observing life cycles, and third graders learn

### MOVIE 2.5 Third-Grade Forces and Motion Unit



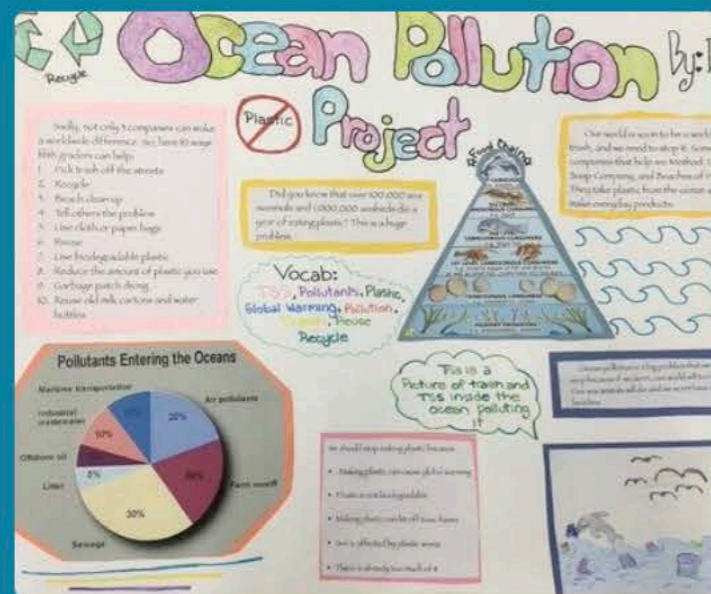
Third graders explore forces and motion with digital technology



forced and motion through playground investigations. We strive to make all learning meaningful by building connections to “real life.”

One of our biggest ways we capture real-world engagement is by solving real-world problems.

## GALLERY 2.5 Fifth Grade STREAM Project



Students use their iPad devices to not only explore and research these global concepts but also learn about ways they can make a difference. They become a tool to create content that will make a larger impact on the world.

Let's peek at a fifth-grade classroom that is learning about matter and food webs. All of their investigations are done through the problem of plastics in the ocean. They learn how plastic never goes away (matter) even when it is broken down into small, almost minuscule pieces.

Students not only consume information, but they learn to make connections, adapt what they

learn, think through problems, and create new solutions. Connecting thoughts, information, and ideas encourages divergent thinking. As students look at situations and problems from different perspectives, innovative ideas are born.

## MOVIE 2.6 SWPPP Presentation 2019



Our SWPPP (Storm Water Pollution Prevention Plan) Team created this presentation to demonstrate how the work they did this year is making a positive impact on our school and the environment.

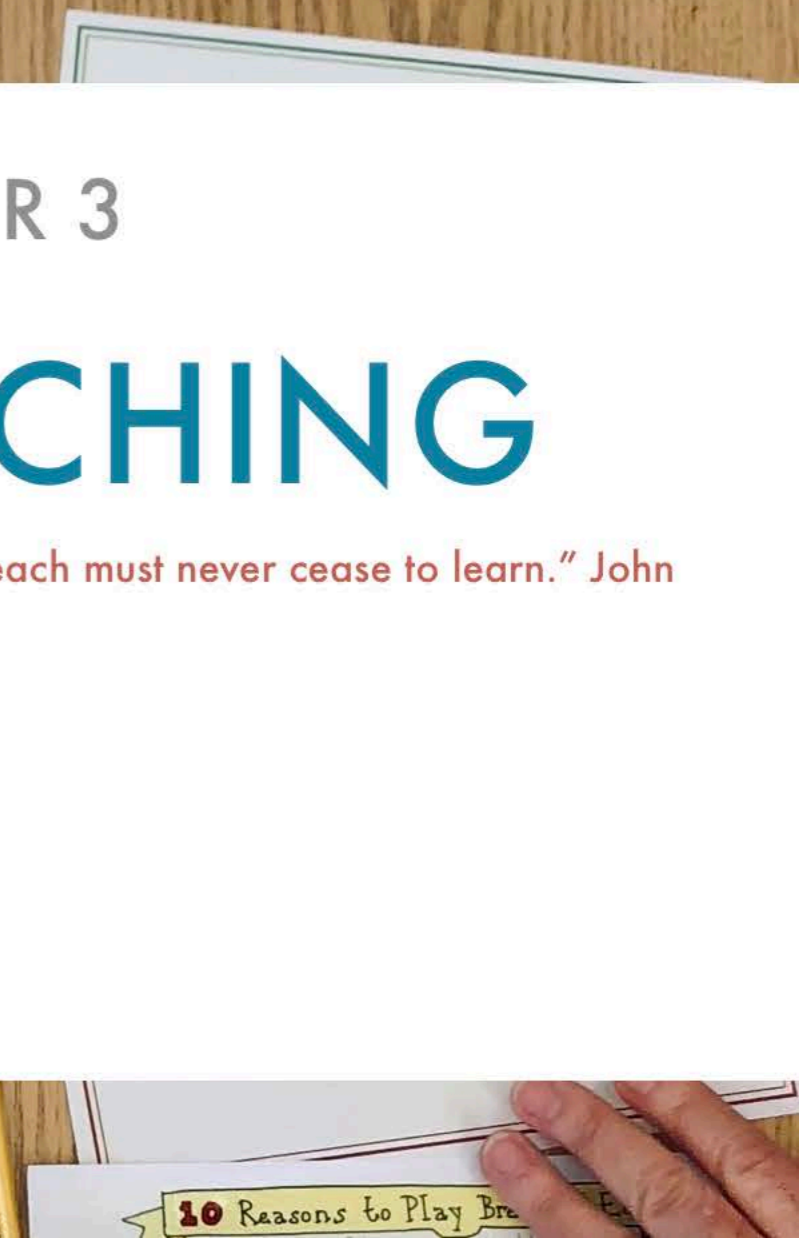
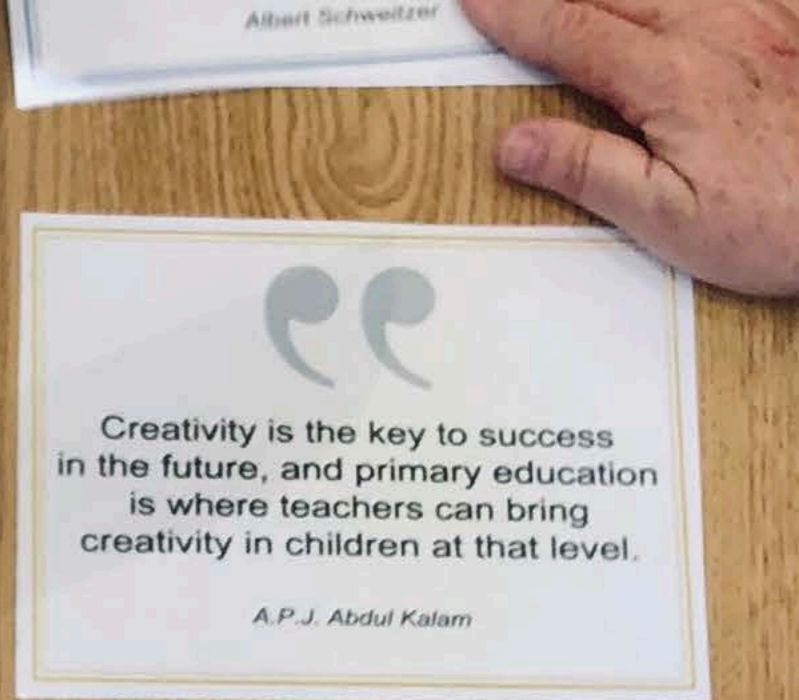
Encinitas partnered with The Storm Water Pollution Prevention Plan (SWPPP) Internship Program to support our students who have a passion for the environment. SWPPP "hires" students to study storm-water pollution on their campuses and to develop and present structural and educational recommendations in accordance with industry standards.



## CHAPTER 3

# TEACHING

"Who dares to teach must never cease to learn." John C. Dana





## TEACHING

[Professional Learning](#)

[Instructional Design](#)



# PROFESSIONAL LEARNING

At Olivenhain Pioneer, students are not the only ones enjoying passion-based learning experiences. All teachers pick their preferred professional learning pathway. This means that they have a choice in areas they want to learn and grow as teachers.

The district-issued teacher iPads and MacBook Pros ensure that every teacher has the technology tools to access various kinds of learning opportunities.

## DISTRICT PROFESSIONAL LEARNING

Additionally, Encinitas Union School District offers teachers a variety of options for further developing their professional skills. This year, professional learning options included CGI (Cognitive Guided Instruction), Project-based learning, Personalized Learning, and choose your own pathway.

Cognitively Guided Instruction (CGI) is a professional development program based on an integrated program of research focused on the development of

students' mathematical thinking; instruction that influences that development; teachers' knowledge and beliefs that influence their instructional practices; and the way that teachers' knowledge, beliefs, and practices are influenced by their understanding of students' mathematical thinking.

During the Project-based learning pathway, teachers learn to develop, plan, execute and evaluate projects specific to their standards and grade level.

They learn how to use technology meaningfully to design projects that give students options for sharing their learning.

The Personalized Learning pathway teachers learn about how student agency, voice, and choice allows them to personalize learning in ways that foster student questioning and connects learning to student interest. The learning sessions help teachers implement specific strategies for learning about students' passions, questions and facilitate experiences that connect their interests to the content standards. Additionally, teachers learn techniques that they can apply in order to offer students more choice in using digital tools such as iMovie Trailers and GarageBand to show their learning.

Finally, teachers are also given a choice to create their own professional pathway. Some teachers choose an area in which they are passionate and want to learn more. This year, a few teachers at Olivenhain Pioneer Elementary choose to get STEAM certified.

## SCHOOL SITE PROFESSIONAL LEARNING

In addition to the district professional development opportunities, teachers also get professional learning experiences at our school site. Since one of our big goals is to heavily implement Apple's Everyone Can Create Curriculum, we are providing teachers with multiple opportunities to play with and experience different creativity tools. We recently had a "Play-based" professional learning opportunity for teachers to go through a "wheel of learning."

During our play-inspired professional learning, teachers got to go to different stations and learn about different creativity tools. They also received tips and ideas about how

they could apply these tools in their classrooms immediately. Teachers learned about photography techniques and how they could use



the Camera Tool, Photos, and Keynote to create photo collages. They learned how these can be excellent tools to incorporate into publishing student writing! Additionally, teachers learned iMovie techniques and how to tie it into Language Arts. Finally, teachers learned some of the basics of GarageBand and how music creation and how to use it in Social Studies and Poetry.

Another important learning opportunity for our teachers comes with our Teacher Enrichment Wheel. At Olivenhain Pioneer, professional

learning and collaboration are embedded in the school culture. Since we want students to be effective communicators and collaborators, our teachers model these skills with their own peers.

To support this, the school day is structured around giving teachers time to collaborate with colleagues. Grade level teams meet weekly to analyze data, plan STREAM units of study, and create meaningful learning experiences for students. During teacher grade level collaboration, students participate in enrichment classes that further integrate the STREAM philosophies. Students attend classes such as STREAM Lab, Music, CAD (Creativity through Art and Design), Physical Education, and Wellness.

### Movie 3.1 Meet the OPE STREAM Team



Enrichment teachers at OPE are a huge part of our STREAM Learning!

# INSTRUCTIONAL DESIGN

*"In learning, you will teach, and in teaching, you will learn."* Phil Collins

## INSTRUCTION

Olivenhain Pioneer is redefining "typical classroom instruction." Since our students have had one-to-one devices for the last seven years, students in Sixth-Grade have been using an iPad in the classroom since Kindergarten. Students demand innovation.

Teachers have no choice but to modernize their instruction to keep up with the changing culture. The current instructional model has shifted toward a more collaborative and blended learning standard. Students readily share their learning and explain their thinking to the class. With an AppleTV in every classroom, students project their work for the class to see from anywhere in the classroom.

There is little need for all students to be doing the exact same thing at the same time and instead get more individualized instruction serving their individual learning needs.

## SCIENCE AND ENGINEERING

Additionally, the iPad has greatly changed the way students interact with science and engineering projects. In science, students often use the Camera to take videos and photographs during a hands-on lab to document the learning process. Lab write-ups



and reflections are often digital as students use the Markup tool to write directly on the images.

Students use Keynote, Pages, or Google Slides as digital science notebooks. Having the science journals digitally make it easier for the students to access their work in both the science lab and in their homeroom classrooms. Content is easily shared between the science lab teacher and the classroom teacher using tools such as PowerSchool and Google Drive. Additionally, teachers are able to access student work remotely. Recently, students started using the Sketches for school app to create sketch notes for science content. Finally, students also use the Clips app to do a final reflection after a unit of study. It provides students a way to verbally and/or visually explain their learning.

With Engineering projects, students often use Google Slides or HyperDocs to plan and brainstorm collaboratively with their group. They use the Camera to take photos and film their design process and the testing phase. Students enjoy using the Time-Lapse feature to video their entire creative process. Having visual documentation of the engineering design process and the testing phase makes it easier for students to analyze their prototypes and find ways to improve.

## C.A.D. (CREATIVITY THROUGH ART AND DESIGN)

One of the new classes we added to the enrichment wheel is CAD (Creativity through Art and Design). This class blends traditional, hands-on art techniques with digital creativity tools. Our CAD classroom uses creativity to enhance and support the STREAM units for

### MOVIE 3.2 4th Grade Photograph Unit



See how photography integrates with STREAM Lab

each grade level. For instance, earlier this year in CAD, all grade levels engaged in a photography unit. Students used the Camera tool, photo editing, and Clips to create a photo story. Third graders used photography to capture still images of forces in motion, fifth-graders focused on Social Emotional Learning and used the Camera to capture different moods, while sixth-graders created photo stories that demonstrate the World-Ready Traits.

### MOVIE 3.3 4th Grade STREAM Lab Unit



Take a peek of some of the integrated learning that goes on in our STREAM Lab.

## INTEGRATED LEARNING EXAMPLE

A prime example of integrated learning and innovative technology is the fourth-grade STREAM Unit on California Plants. Students learned about the various plants and their internal and external structures in our school biomes. In the science lab, students explored the biomes, took photographs and notes, and dissected plants to analyze internal structures. In the classroom, students wrote informative paragraphs about the plants and then created QR codes for the Biomes. Now all students can scan the QR codes to learn more about the

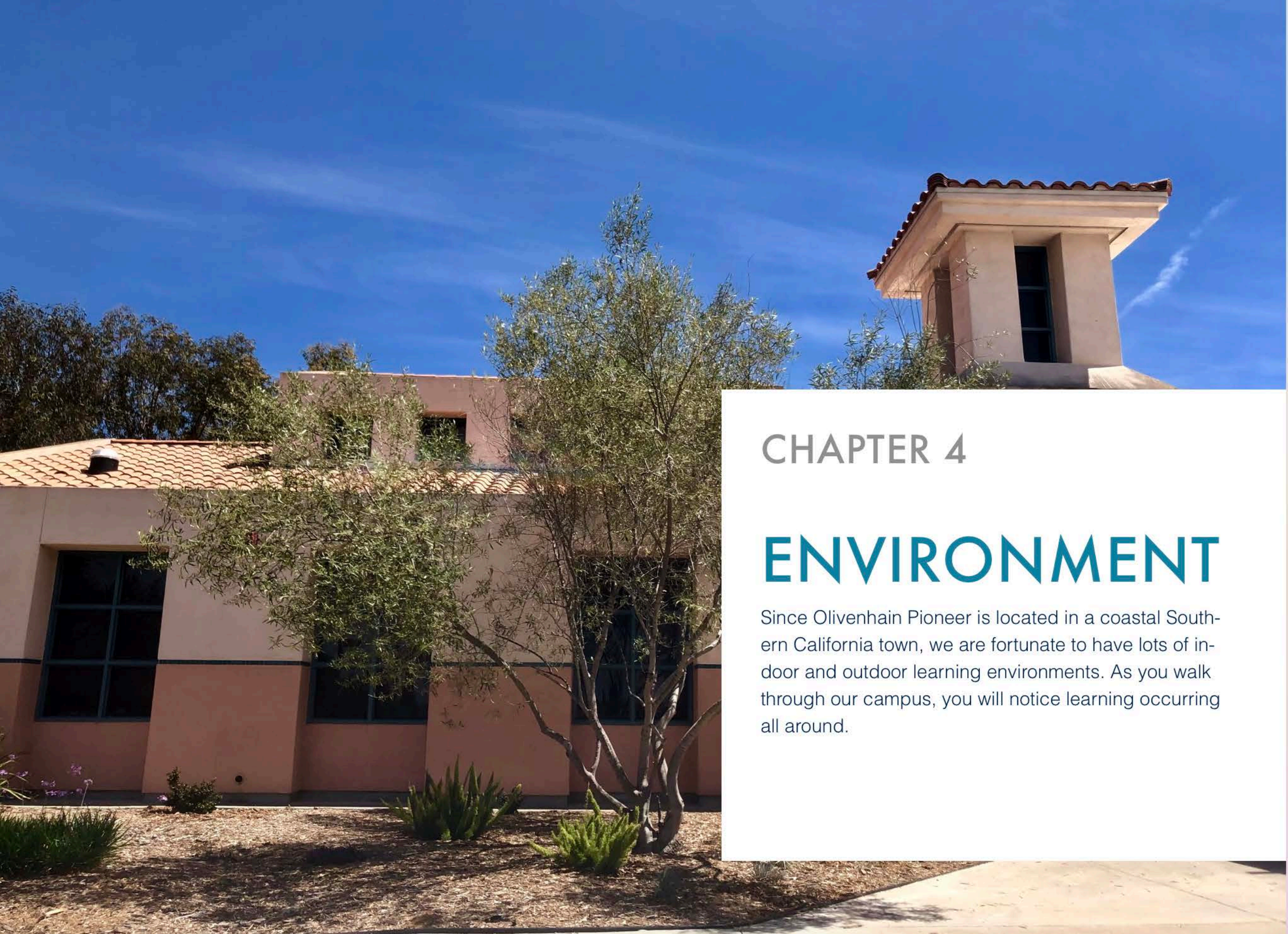
plants in the biomes. In CAD class, students photographed plants in the biomes with the Camera, edited them using a photo editing tool, and put together a photo story using the Clips app.

## STUDENTS AS TEACHERS

With a one-to-one iPad initiative, the traditional classroom roles changed. Now teachers and students are co-teachers and co-learners. Teachers no longer drive instruction but are engaged passengers helping to navigate and create a collaborative learning experience. Students step out of their traditional roles as the learner and become teachers to both students and teachers.

Students teach students. Every student has strengths. In the past, only the students who thrived academically were usually highlighted as helpers. However, with a focus on creative and technological skills, all students are positioned to be experts. With unique abilities and talents, all students can support others who have different strengths.

The STAR Tech program is a student-lead tech support program at OPE. Students are trained in the summer on all of the digital curriculum and they become the tech experts onsite. When students and/or students have technology issues, the STAR Tech students are the next to help out. Additionally, they are trained on our Cyber-safety rollout and they gain information literacy skills that they help train others. Informational literacy is very important with internet research that occurs during our passion-based STREAM learning.



## CHAPTER 4

# ENVIRONMENT

Since Olivenhain Pioneer is located in a coastal Southern California town, we are fortunate to have lots of indoor and outdoor learning environments. As you walk through our campus, you will notice learning occurring all around.



## ENVIRONMENT

Learning Spaces

Infrastructure Design

### LEARNING SPACES

The gardens and biomes provide an outdoor classroom where students learn environmental science. The media center is filled with books, but also a green screen film studio. The STREAM Labs are for conducting hands-on experiments, and the engineering design process where students are constantly building, tinkering, designing and creating. Pods and courtyards for collaborative group learning. A CAD classroom that has a space for creating fine arts projects and another space for using digital creativity tools. A music room for exploring instruments and a recording studio. Classrooms spaces for asking questions, sharing ideas, and loving learning.

### GARDENS AND BIOMES

Where learning comes alive! With beds of corn, zucchini, lettuce, cucumbers, and flowers, our OPE gardens truly create a space where children can experience learning in a different way. Many of the students use their iPads to identify plants in the garden and make videos of each other speaking on our garden stage about different gardening techniques. Our biomes are filled with QR Codes created by students to learn more about the California biomes.

## GALLERY 4.1 STREAM Lab



Fifth Graders experimenting with chemical reactions.



## STREAM LABS

As a STREAM school, we take our lessons in the classroom to a whole new level. We have two STREAM Labs on campus: an upper-grade and lower-grade. During STREAM Lab students are exposed to hands-on projects that incorporate Science, Technology, Research, Engineering, Arts and Mathematics. Students research scientific topics and take notes, photographs, and videos on their iPads. They are also able to interview each other about current learning experiences using iMovie or create a short Clips film to reflect on a unit.

Additionally, the STREAM Labs are a place for engineering, designing, and making. We even have a passion-based MakerSpace club for upper-grade students. “The best way of learning about anything is by doing it.” The theory behind the Maker Movement is exactly that. So in this space, you will find a room filled with tools of every

sort and a place where imaginations and curiosity run wild. From the spark of an idea to the creation of their product, students learn to research, build, brand, market, and sell their creations for profit....our next generation entrepreneurs.

## MEDIA CENTER & MULTIMEDIA STUDIO

The media center is the pulse of the school. The Library Media Assistant (LMA) empowers students to be critical thinkers, enthusiastic readers, skillful researchers and ethical users of ideas and information. No longer are students told to sit and read quietly in the Library. Instead, students code, collaborate to solve Breakout Edu boxes, Skype with and engage in passion-based research projects.

## GALLERY 4.2 Media Center



Fifth Graders coding in the Media Center.



The LMA engages students by using instructional technology during class visits and before-school clubs and fosters an environment that welcomes student input, agency, and creativity. Equity of information access is a primary emphasis of the American Association of School Libraries, and by providing 1:1 iPads, and 24/7 access to digital information resources, this is wholly achieved.

Additionally, the Media Center is the hub of passion-based learning at OPE. Students are encouraged to pursue their passions and even develop clubs based on their interests. This year, our Library Media Assistant runs a before-school Harry Potter Club with over 60 Harry Potter crazed students. Students are in the library during their recess, lunch, and after school, creating Harry Potter films, designing and building Harry Potter displays, and even creating Media Center Decorations using the Harry Potter Theme.

The Multimedia studio is where you can find our Film Guild Club meeting to plan, write scripts, storyboard, film, and edit their passion-based films.

## PODS AND COURTYARDS

With an iPad in the hand of every student, learning extends past the classroom walls and allows for more collaborative learning spaces. At Olivenhain Pioneer, we have clusters of classrooms around an inside “pod” or community space. This area is often used for group work and collaboration. Additionally, outdoor courtyards with quiet benches provide students an outdoor classroom space to work on a quiet task or collaborate with a small group. Flexible learning

### INTERACTIVE 4.1 Group Collaborating in an outdoor courtyard



spaces allow students to choose to work in places that support their learning needs.

## LEARNING BEYOND THE CAMPUS

Olivenhain Pioneer emphasizes that learning takes place everywhere, but especially outside of the four walls of the classroom. The district's 10-acre [Farm Lab](#) is one way that students step outside

and continue their learning. Students experience a DREAMS approach to education that incorporates Design, Research, Engineering, Art, Math, and Science into game-based, hands-on lessons that take place in an agricultural setting.

Even at the elementary school level, students are encouraged to ask questions and devise plans for implementing their own research.

This student-driven research and solution planning often take place in conjunction with local municipalities and universities.

#### GALLERY 4.3 EUSD Farm Lab



EUSD's Farm Lab extends learning outside the classroom.



# INFRASTRUCTURE DESIGN

Our school district, upgraded the IT infrastructure at our school site to support the number of anticipated devices to be able to connect wirelessly to the network. This provides a smooth transition as devices are added onto the network.

Additionally, our district focused on providing each student with their own space in which they can remotely save and share documents with their teacher. We have utilized Google apps for education and the Power School learning management system to provide all teachers with immediate access to any student work on their iPads. Additionally, we recently incorporated Apple Classroom for easier management of iPads. This has been successful in providing easy access to student work for all teachers and a helpful tool for holding students accountable.

## DISTRICT PROFILE

- 22% minority population
- 10% English language learners
- 14% free and reduced lunch
- 5,400 students in nine K-6 schools and one special education pre-K program
- All nine schools are California Distinguished Schools
- Four National Blue Ribbon Schools

