

**COLD SPRING SCHOOL DISTRICT  
TECHNOLOGY PLAN  
2017-2018**

**BOARD OF TRUSTEES**

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## **Vision**

The students of Cold Spring Elementary School live in the twenty-first century. The rapid changes in society and the impact of future technology advances will dictate their constantly changing educational and personal needs. Schools today must take the responsibility to prepare our students to live and work in the world that will be theirs. It is the vision of Cold Spring School to support the following tenets:



- 21<sup>st</sup> Century Interactive Classrooms
- Technology is a Part of Everyday Life
- Provide Students with College and Career Readiness Skills
- Personalized - Student-Centered Focus
- Optimize Teaching and Learning

Today's students look at technology as part of their everyday environment. Visual and interactive media have altered how we access information, organize and process data, and communicate our thoughts and ideas. Over the past twenty to thirty years, several themes have persisted in education and challenged teachers and administrators to develop a more student-centered and project based curriculum. These themes include:

- Providing multi-sensory instruction;
- Increasing time on task and instructional minutes;
- Differentiating learning to respond to the student's skill level, interests, and learning styles;
- Assessing student understanding and progress continually in order to redirect instruction at the "teachable moment;"
- Shifting the responsibility for learning from the teacher to the student with the teacher's role becoming more of a facilitator than lecturer;
- Increasing student engagement and achievement by providing project-based learning and increased student inquiry in a more creative and problem solving environment.

This document presents the technology plan for Cold Spring School. It details the plan for the implementation of computers and related technology into the curriculum of the school. The focus of this integration will be the acquisition of appropriate hardware and software and staff development. Researchers agree that the success of any school district's technology plan depends on providing appropriate time, resources, and support for staff development. Our overall vision is for technology to become an integral instructional tool used by teachers across the curriculum to enhance the learning of our students, and additionally, to enable Cold Spring School to better meet the needs of our entire school community.

## **Mission Statement**

We believe that our emerging challenge as educators is to prepare students to use basic skills and computer technology as tools for thinking and problem solving.

Teaching our children how to use technology means developing computer literacy. Applying computer technology means integrating computers into the educational process.

Computer literacy will be developed through familiarity and use, not merely through isolated skill instruction. This will be based upon the integrated and meaningful use of technology into daily classroom activities, which will be designed to provide both individualized and group instruction. Through age-appropriate applications, students at every level will use computer in their work to:

- expand their thinking and problem solving skills
- search out information
- gather and present information
- exchange communication in a safe and ethical manner
- gain new perspectives
- reach new conclusions

Technology resources will be provided at all grade levels and for all areas of academic instruction with the overall goal of preparing our students to compete effectively in the global economy of the future where such skills will be a necessity.

## **Belief System**

- We believe that we should be asking our children, "What problems do you wish to solve? Instead of, what do you want to be when you grow up?"
- We believe our students are Creators and that their work matters.
- We believe in supporting student Passion projects. We are trying to empower our students to be critical and creative thinkers.
- Cold Spring School has an attitude that "Every Learner is a Creator." We believe our teachers Design the Conditions for our Creators.

### **Our Goals:**

Since 2006, Cold Spring School has been a leader in various areas of curriculum, including technology in order to reach higher levels of student engagement as well as college and career readiness skills. Teachers have consistently engaged in lesson study models and professional development in order to meet the needs of their students. This professional development continues with the current process of engaging the community and parents in conversations on the expectations, relevance, and demands of the 21st century.

From our vision and belief system, the following goals were developed for Cold Spring School:

To improve student learning by:

- Increasing student engagement in project based learning,
- Increasing student motivation and interest in learning,
- Increasing opportunities to engage students in learning activities that promote student critical thinking, creativity and innovation.
- Increasing the differentiation of instruction to address students' varied interests, learning styles/modalities, and grade level content areas.
- Improved student achievement in grade level content areas.
- Improved computer literacy skills, including the use of computers for productivity, to locate and critically evaluate information, and to communicate knowledge and ideas more effectively.

To sustain our viable program by:

- Enabling students to use technology in their daily lives to communicate, learn, and manage information.
- Utilizing available technology in the classroom to increase the efficacy of instruction and assessment.
- Attain funding for implementation and ongoing operation of current and newly acquired technology.
- Utilizing electronic networking and telecommunications to support information management in classrooms and throughout school such as ParentSquare.
- Developing the internal expertise to sustain the technology program, including staff development and system maintenance.

The technology goals for student learning hold the potential to transform learning when it:

- Personalizes learning
- Encourages collaboration
- Provides an audience beyond the teacher
- Allows curriculum to be accessed outside of the limited time span of a typical class period, school day, and the walls of the classroom
- Allows for differentiated learning
- Mirrors the way work is done in professional careers and the world
- Invites students to be creators of content, not just consumers
- Connects students to the world in order to provide meaning and purpose to what they are learning.

## **Current State of Technology at Cold Spring School**

Cold Spring School has an Ethernet local area network (LAN) with a Category 5 coaxial cable connection to all classrooms and the office. CSS has a 50mb connection between the school and its ISP, Cox Communications, for Internet Access. The main file server is a Mac Mini Server running OS 10.8.

In 2006-07, the school implemented a one-to-one laptop program that replaced the school computer lab. 75 iBooks were purchased the first year and 60 MacBooks the following year for a two-year implementation in grades 3-6. The purchase history from 2006 to present is outlined below.

### **PURCHASE HISTORY:**

- 2006-2007: Purchased 75 MacBooks for fifth and sixth grade students
- 2007-2008: Purchased 60 MacBooks for third and fourth grade students
- 2010-2011: Purchased 35 MacBooks for second grade
- 2010-2011: Purchased Document Cameras for every classroom (parent club)
- 2010-2011: Purchased and mounted ceiling projectors for every classroom
- *2010-2011: 75 Computers were stolen from 4-6th grade classrooms*
- *2010-2011: 68 of the 75 stolen computers were recovered and returned back to CCS*
- 2011-2012: Purchased 35 MacBooks for teachers/specialists/staff and to replace the 8 stolen computers in 4-6th grade.
- 2011-2012: Purchased 20 iPads (foundation) to be shared between the lower grades.
- 2013-2014: Purchased 17 MacBook Pros for all teachers. The teacher computers purchased from 2011-2012 were then placed into a mobile cart to support Kindergarten and first grade students.
- 2013-2014: Apple TV purchased and installed in every classroom
- 2013-2014: Purchased 20 MacBooks to replace sixth grade computers
- 2014-2015: Updated the wireless network across the entire school with Aerohive Wireless Devices
- 2015-2016: Purchased 20 MacBook Air computers to replace old fifth grade computers
- *September 12, 2016: Board approved the authorization to declare 86 laptops obsolete to be delivered to Marborg Industries electronic recycling.*
- 2016-2017: Purchased 20 MacBook Air computers to replace old fourth grade computers
- 2016-2017: Purchased 10 iPads to support Computer Specialist instruction and 2-6th grade classrooms as needed
- 2017-2018: Purchased 4 MacBook Air computers for increased enrollment in 4-6th grade

**Current Technology in each of the transitional kindergarten through grade six classrooms for the 2017-2018 school year:**

- TK/Kindergarten and First Grade: Share a MacBook mobile cart of 19 (2010) and 6/7 iPads in each classroom.
- Second Grade: 1:1 MacBook (2006-2009)
- Third Grade: 1:1 MacBook (2006-2007)
- Fourth Grade: 1:1 MacBook (2015-2017)
- Fifth Grade: 1:1 MacBook (2015-2017)
- Sixth Grade: 1:1 MacBook (2015-2017)
- **Mobile Cart:** 10 iPads

**Hardware Inventory:** A comprehensive inventory of the hardware used at Cold Spring School can be found attached to the technology plan or it can be located electronically by clicking [Here](#).

Additional instructional support is provided for each classroom through document cameras purchased by the Parent Club and ceiling mounted projectors, which were installed in the Summer 2010 with Measure C Bond funds.

## **FOUR PRIORITY AIMS**

### **AIM 1: Shared iPads and MacBooks for TK-1st grade students and 1:1 MacBook Air for 2-6th grade**

- Fundamentally alters the learning environment- providing students with skills necessary in college and career
- Focus on learning goals
- Customization more likely for students

### **AIM 2: Life, Career and College technology readiness skills for students**

- Technology is no longer a tool (it's part of your everyday life)
- Technology learning environments allows for the creation of new tasks that would otherwise be inconceivable without technology

### **AIM 3: Professional Development for Parents**

- Parent workshops beginning October 2017 on cybersecurity and student data privacy
- Superintendent presentation beginning December 2017

### **AIM 4: Professional Development for Teachers**

- Technology Specialist and Coach/Integrator from the SBCEO
- SBCEO workshops beginning August 2017
- Classroom observations and coaching focused on technology integration using



## **AIM I: 1:1 MACBOOKS FOR 2-6TH GRADE STUDENTS**

### **Year One Goals: 2017-2018**

- A. Address infrastructure needs with the district technology leaders
- B. Solicit buy-in and support from students, parents, teachers, community members and the Cold Spring Board of Education to improve technology.
- C. Create and submit to the Board of Education a 3rd grade Lease to Own implementation and distribution plan that involves: cost, personal, support from ParentSquare, student-parent agreements.
- D. Create ongoing teacher and parent trainings to begin August 2017.
- E. Distribute MacBooks Air to all third grade students by January 2018.

### **Year Two Goals: 2018-2019**

- A. Move current fourth grade (2015-2017) computers down to second grade in August 2018.
- B. Continue to implement 3rd grade Lease to Own program and distribute computers to all third grade students by October 2018.
- C. Continue ongoing teacher and parent trainings to begin August 2017.
- D. Purchase New MacBook Airs for classroom teachers and distribute old teacher computers to first grade.

### **Year Three Goals: 2019-2020**

- A. Move current fifth grade (2015-2017) computers to STEAM to support lower grades.
- B. Continue to implement 3rd grade Lease to Own program and distribute computers to all third grade students by October 2019.
- C. Continue ongoing teacher and parent trainings.
- D. Purchase new MacBook Airs for Specialist teachers and office staff then distribute old teacher computers to first grade.

### **MacBook Air Assumptions for a Four Year Cost (3-6th Grade) for the Lease to Own Program:**

- MacBook Air (includes tax and apple ed. discount) \$893.25
- AppleCare+ \$139.00
- Case \$40.00
- **Total Cost** **\$1,072.25**

### **The Following Payment Plans are Available to Parents:**

- **5 Monthly Payments \$100.00**
- **4 Monthly Payments \$125.00**
- **2 Monthly Payments \$250.00**
- **1 Payment \$500.00**
- **Plus Option to Buy for an additional \$100**

**Spring 2021 (6th grade)**

## **AIM 2: Life, Career and College Technology Readiness Skills for Students**

### **Performance Measures**

#### **Annually:**

- Using formative assessment data from Renaissance Learning to progress monitor their growth in Reading and Mathematics and set academic goals with the teachers support. The teacher will use formative assessments to provide to inform intervention and enrichment groups.
- Using Common Core State Standards Smarter Balanced Common assessment results, increase academic achievement for all students. Increase proficient/advanced scores each year, using 2016-2017 as the baseline.

### **Year One Goals:**

#### **Identify Key Shifts in Learning**

- A. For example: English Language Arts
  - A. Reading-staircase of increasing complexity in fiction and nonfiction
  - B. Writing- logical arguments; opinion writing; research
  - C. Speaking and Listening-small and large groups
  - D. Language-formal and informal
  - E. Media and Technology-critical analysis of and production of media
- B. Introduce 1-6th grade students to computer science skills by participating in the nationwide "Hour of Code" - December 2018.
- C. Teach students and teachers how to create shared projects in Google Suite.
- D. Implement keyboarding program in 3<sup>rd</sup>-6<sup>th</sup> grade.
- E. Implement Renaissance Learning STAR Reading and STAR Math assessments for grades two through six (5 times a year) to support progress monitoring towards student goals and achievement.
- F. Implement Renaissance Learning Accelerated Reader and Math
- G. Implement Coding into the Core Curriculum in TK-6
- H. Implement Keyboarding, Typing without Tears, in TK-5

## **AIM 2: BUDGET**

- Dreambox Learning (TK-3rd grade)  
\$2,575.00
- STAR Reading and STAR Math(2-6th) and Accelerated Reader(K-6th)  
\$2,485.00
- Accelerated Math and Math Facts in a Flash  
\$2,932.00
- Reading Eggs/Reading Eggspress (K-3rd)  
\$1,500.00
- Keyboard without Tears (K-5)  
\$899.00
- Bit Vision (content filter, network, tech support for office computers and backup for district office computers)  
\$6,000.00
- BrainPOP and BrainPOP Jr. (TK-6)  
\$2,295.00

**TOTAL: \$18,686.00**

### **Year Two Goals::**

- A. Introduce 3D printing to all 3-6th grade classrooms
- B. All 5<sup>th</sup>-6<sup>th</sup> grade students will create a 3D item using the formula for volume and circumference.
- C. Introduce higher level STEAM projects that involve a laser cutter printer
- D. Create an after school enrichment class involving computer programming

## **AIM 2: BUDGET**

- Two 3D printers and film - \$5,000
- Laser cut printer - \$25,000
- Acrylic for laser cut printer - \$5,000

**TOTAL: \$35,000**

### **Year Three Goals:**

Cold Spring School will have implemented the following:

- A. A 3D printer/laser cut printer curriculum in every 2-6th grade classroom.
- B. A comprehensive computer programming curriculum to support students in K-6th grade.

Rigorous, relevant, student-centered, hands-on instruction and experiences at each grade level - for at least the four content areas - that will have either a formative or capstone project-based learning experience, based in part on Common Core State Standards and individual interest.

### **AIM 3: Professional Development for Parents**

#### **Year One Goals:**

- A. The school will offer parent workshops beginning Fall 2017.
- B. The computer curriculum specialist will teach a Google Suite class.

#### **Year Two Goals:**

- A. Students will be selected to teach parent classes.
- B. Create a weekly student lead “Lunch Genius Bar” to support parents and students.

#### **Year Three Goals:**

- A. Develop a plan to have the school open before/after regular school hours to support parents with technology.

### **AIM 4: Professional Development for Teachers**

#### **Year One Goals:**

- A. The Technology Specialist will work in collaboration with the SBCEO Director of Technology to teach a series of G Suite workshops.
- B. The superintendent/principal will consult and plan with CCSD Technology Specialist and SBCEO Director of Educational Technology Services to research, develop, plan, and facilitate customized professional learning for (K-2) and (3-6) teachers in Google Suite.
- C. The superintendent/principal will consult and plan with CCSD Technology Specialist and SBCEO Director of Educational Technology Services to plan and prepare for classroom observations and coaching.

### **Scope of Work: Google Suite and Cybersecurity**

Santa Barbara County Education Office (SBCEO) will provide professional development and support to the teachers of the Cold Spring School District (CSSD). Director, Matt Zuchowicz, SBCEO Director of Educational Technology Services, will consult with Dr. Amy Alzina, Superintendent, and Christian Garfield, CSSD Technology Specialist, to support a vision for educational technology, and will develop presentations on technology integration for CSSD teachers, administrators, and parents. Matt Zuchowicz will also work with Christian Garfield to develop professional learning opportunities for CSSD teachers centered on the resources of the Google Suite for Education.

### **Google Suite:**

G suite for education is a suite of free productivity tools available to schools and districts to help with classroom collaboration. It provides tools that allow staff and students to create, share, and edit files collaboratively in real-time. All files created are automatically saved in the cloud, and can be accessed at any time, from any device. Using G Suite for Education, students will learn how to use technology to communicate, create, and collaborate with others.

### **Cybersecurity:**

Christian Garfield will be enrolled in the Santa Barbara County e-safety Network, includes 3 lunch meetings, to help develop understanding of current Cybersecurity and student data privacy laws and best practices.

<b>Goals</b>	<b>Actions</b>
Develop vision of Educational Technology for CSSD.	The superintendent/principal will consult and plan with CCSD Technology Specialist and SBCEO Director of Educational Technology Services to develop a shared vision and present to staff and parents.  Teacher PL Date: 8/16/17

<p>Build capacity with CCSD Classroom teachers.</p>	<p>The superintendent/principal will consult and plan with CCSD Technology Specialist and SBCEO Director of Educational Technology Services to research, develop, plan, and facilitate customized professional learning for (K-2) and (3-6) teachers in Google Suite.</p> <p>Teacher PL Dates: 11/1/17, 1/10/18 and 3/7/18</p>
<p>Educate parents on Cybersecurity and student data privacy.</p>	<p>The superintendent/principal will consult and plan with CCSD Technology Specialist and SBCEO Director of Educational Technology Services to present to parents on cybersecurity and student data privacy and a Superintendent/Principal Coffee.</p> <p>Parent PL Date: 11/13/17</p>
<p>Conduct 2 half days of classroom observations and coaching focused on technology integration using Google Suite.</p>	<p>The superintendent/principal will consult and plan with CCSD Technology Specialist and SBCEO Director of Educational Technology Services to plan and prepare for classroom observations and coaching.</p> <p>Classroom Observation Dates: TBD</p>

**Professional Development Budget**

**Timing:** August 2017-June 2018

**Scope of Work:** 8 half days facilitation with SBCEO personnel at \$400 per half day + mileage = \$3,264.24. Consultation, research and development, planning and preparation and ongoing follow-up throughout the year with SBCEO personnel = \$3,300.00.

Enrollment fee for Christian Garfield to attend the SBCEO e-safety Network (3-meetings) = \$150

**TOTAL: \$6,714.24**

Funding Source: Cold Spring Foundation

## INVESTMENT SUMMARY

AIM	COST
AIM 1:	Year 1: 3rd Grade Lease to Own Pilot: \$12,800
AIM 2:	Year 1: Programs \$18,686
AIM 3:	Year 1: G Suite and Cybersecurity \$6,714.24
AIM 4:	Year 1: G Suite and Cybersecurity
<b>TOTAL:</b>	<b>\$38,200.24</b>