CTE Board Study Session

17 November 2021

CAREER TECHNICAL EDUCATION

CTE offerings at Santa Cruz City Schools

1 Santa Cruz High

- Automotive Technology
- Bicycle Technology
- Mill Cabinetry
- Graphic Design
- Photography
- Computer Science~

2 Harbor High

- Automotive Technology
- Health Careers*
- Medical Technology*
- Bicycle Technology
- Mill Cabinetry
- Graphic Design
- Video Production
- Photography
- Computer Science~

3 Soquel High

- Sustainable Agriculture
- Bicycle Technology
- Biotechnology*
- Construction Tech
- Mill Cabinetry
- Welding*
- Photography
- Graphic Design
- Floral Design
- Sports Medicine*

COE CLASS OFFERINGS

- Fire Technology (Natural Bridges HS)
- Culinary Arts (Mission Hill MS)
- Hospitality (SC Beach Boardwalk)
- IT Essentials (Star Community School)

* Magnet Classes with asterisk welcome 11th and 12th graders from other campuses. Students must provide their own transportation.

~Computer Science is currently offered as part of the core curriculum.

CTE Program Overview

- 2020 CTE Completer Grad Rate: 100% & 2021 CTE Completer Grad Rate: 98.9%
- 1 CTE Counselor & 1 CTE Teacher on Special Assignment
- 1 Auto Shop, 3 Wood Shops & 3 Bike Shops
- 16 CTE Teachers
- 31 different CTE courses
- 15 CTE pathways (minimum of beginning and advanced courses)
- Courses in 8 of the 11 CTE sectors
- All CTE classes produce a portfolio inclusive of resume, cover letter, letter of rec, work samples, references, job application
- Newest CTE Course: CTE Dance Choreography

of Students in Each Pathway

Pathway	Enrollment
Sustainable Agriculture	186
Ornamental Horticulture	55
Design, Visual, and Media Arts: Digital Photography	179
Design, Visual, and Media Arts: Graphic Design	205
Video Production	67
Residential and Commercial Construction	36
Cabinetry, Milling, and Woodworking	110
Child Development	7
Medical Technology & Health Careers*	98
Patient Care - Sports Medicine*	29

of Students in Each Pathway Cont.

Pathway	Enrollment
Biotechnology* (currently building pathway by adding Biotech 2 in 22-23)	45
Software and System Development - Computer Science (not currently CTE)	89
Welding and Material Joining*	46
Auto: System Diagnostics, Service, and Repair*	88
Bike: System Diagnostics, Service, and Repair	127
CTE Wheel: Construction, Woodworking, & Welding	45
Total # of Students Enrolled in CTE	**1,454**

*indicates the course is a Magnet CTE course

California Standards for Career Ready Practice

- effective communication
- development of a career plan aligned with personal goals
- using critical thinking to solve problems
- workplace citizenship
- ethical leadership
- effective teamwork
- applying creativity and innovation
- effective decision making

CTE Model Curriculum Anchor Standards

Common anchor standards across the 15 industry sectors. - 9 standards are deliberately aligned with Common Core English language arts standards

- Academics
- Communication
- Career Planning
- Technology
- Problem Solving
- Health and Safety
- Responsibility
- Ethics
- Leadership and Teamwork
- Technical Skills
- Demonstration and Application

CTE Model Curriculum Pathway Standards

All 15 industry sectors contain multiple pathways with specific standards. Some sample standards include:

Agricultural Mechanics Pathway

B3.0 Demonstrate basic electricity principles and wiring practices commonly used in agriculture.

- B3.1 Explain the relationship between voltage, amperage, resistance, and power in single-phase alternating current (AC) circuits.

Agricultural Business Pathway

A2.0 Explain the fundamental economic principles of agribusiness and agricultural production.

- A2.1 Identify basic economic factors affecting agricultural production and agribusiness management decisions.

CTE Work-based Learning & Leadership

All CTE classes offer work-based learning and leadership opportunities that are embedded into the curriculum.

- Work based learning: guest speakers, resume writing, and career exploration

- Leadership: portfolio presentation, participation in competitions, and student based enterprise providing services to community.

Biotech

Health Science & Medical Technologies

~Nehal Pfeiffer
Soquel High

Bell to Bell Engagement for ALL students

girls, boys, latina/latino, AVID and English Language Learners.

Field Trips

STEM Cell Institute - Pebble Beach STEM Zone - BioMed Devices Conference - Stanford Bioinformatics - YFIOB Luncheon - Girls in STEM @ Lakeview middle school

Pathway and Curriculum

Soquel High currently offers Biotechnology I

- This course is articulated with Cabrillo College's Bio 41T
- Soquel students can continue their Biotech pathway at Cabrillo with a Dual enrollment in Biotech II (Bio42T)
    - completion of this course leads to a certificate in Biotechnology with the addition of a microscopy lab.

Our CTE Biotechnology course and Cabrillo's course both have adopted the same curriculum. Curriculum includes a textbook, a laboratory experiments lab manual, a teacher's manual and workbook.

Rubrics and Assessments

LAB STUDENT

Lab Grading Rubric

Title
2 = The title clearly communicates what the experiment is about. (ie. The Effect of Temperature on Catalase Enzyme Activity)
1 = The title is related to the experiment but does not reflect its primary purpose. (ie. Enzyme Activity)
0 = The title is not related to the experiment. (ie. Enzymes and the Second World War)

Your Score Teacher Score

Abstract
8 = Your abstract is written in a succinct way that clearly and accurately summarizes your experiment, including its purpose, conclusions and next steps.
6 = As above but sometimes unclear.
4 = As above but without clear explanations or supporting evidence from experiment.
2 = Missing one or more of the required parts.
0 = This section was not completed or is not in your own words.

Your Score _____ Teacher Score _____

Introduction
8 = The purpose of the experiment is clearly stated. The hypothesis makes a ***specific*** prediction, is testable and you have explained why you think it is correct.
6 = As above but assumptions may not be stated or your hypothesis does not make a specific prediction.
4 = As above but you have not explained why you choose your hypothesis.
2 = As above but the hypothesis is not testable or the purpose of the experiment is not clear.
0 = This section was not completed.

Your Score _____ Teacher Score _____

Methods
6 = You have clearly and succinctly summarized your procedures for the lab detailing important aspects of your work (materials, sequence, etc.)
4 = Your procedure, though sometimes confusing, would allow someone to replicate your experiment.
2 = Your procedure was copied from the lab, contains errors but could be corrected during the lab.
1 = Your procedure could not be followed as written.
0 = This section was not completed.

Your Score Teacher Score

Data (Collected during the lab)
6 = All data is accurate, reorganized within the lab write-up and clearly labeled. Units are present and used correctly. (ie. 560 grams, 24 seconds, 16 grams/liter)
4 = As above but some data don't have units associated with them.
2 = No units are used.
1 = One or more sections of required data are missing.
0 = This section was not completed.

Your Score Teacher Score

Results (Calculations that use data after the lab)
6 = You have clearly explained your data. If calculations were required they are clearly labeled and use the proper units. All assumptions are explicitly stated and justified.
4 = As above but assumptions are not justified.
2 = As above but assumptions are not stated.
1 = You have not clearly explained your data.
0 = This section was not completed.

Your Score Teacher Score

Conclusion
8 = The conclusion is clearly written and summarizes the major findings of your experiment. It directly relates to the purpose of the experiment stated in the introduction. Explanations are given to justify your conclusions and are based on the data collected in this lab. You have explained possible sources of error in your lab and their origins (ie. Johnny mixed up our solutions). **Questions are stated that could be the focus of further investigation.**
6 = As above but sometimes confusing.
4 = As above but without clear justifications.
2 = The conclusion is not clearly stated or missing parts.
0 = This section was not completed.

Your Score _____ Teacher Score _____

Participation
2 = Your group was seen working actively on the activity. All members of the group participated in the lab. Lab materials were returned clean. The group contributed to a positive working environment in the class.
0 = As above but one or more members did not actively participate.

Your Group's Score Teacher Score

Presentation
2 = Apparent effort was shown in the overall formatting and appearance of the finished lab report. Sections follow in the order outlined in this rubric. The abstract is properly formatted at the top of the paper below the title. Pages are numbered and sections subtitled.
1 = As above but one formatting error was made.
0 = Several formatting errors were made. Overall appearance of lab suggests little effort was made in its formatting.

Your Score Teacher Score

Your Total Score /50 Teacher Total Score /50

Average Total Lab Score /50

CTE Professional Career Skills Rubric:

NAME:	5	10	20
Time Management / Communication ❑ Meets deadlines. ❑ Arrives on time, seated from bell to bell. ❑ Stays focused and on task for the entire duration of the class period. ❑ Uses respectful communication with peers, teacher, and clients. (eye contact, greeting at entry/departure, etc.) ❑ Uses industry terms learned in class, and correct grammar and punctuation (both written and oral).			
Professionalism ❑ Abides by cell phone rule: Phones remain in backpacks for entire period. In rare cases, cell phone may be used as a tool for assignments upon instructor approval, otherwise, cell phone use is prohibited during class. ❑ Handles all equipment with care. Checks out and returns properly. ❑ Helps create a positive classroom environment. Is encouraging and open-minded to others' ideas. Provides helpful feedback during critiques. ❑ Uses computers as productivity tool and not a source of entertainment. ❑ Breaks are used appropriately and kept to a minimum.			
Work Space Awareness ❑ Leaves work space cleaner than how it was found, keeping computer screens, keyboards and desk clean. ❑ Does not alter other's work/files/computers. ❑ Logs out and pushes in chair when leaving class. ❑ Keeps computer files are organized, and desktops remain clear with default backgrounds. ❑ No food or drink is eaten at computer stations. All food containers thrown away in the outdoor trash area.			
Self Reliance / Effort ❑ Is responsible for personal grade by regularly checking. ❑ Turns in work properly so that it can be graded properly. ❑ Checks class website and reads instructions carefully. When absent, uses website as a resource to catch up on missing work. ❑ Practices self reliance before asking for help. Makes sure instructions have been read and accesses all tutorial resources. Asks a friend, then if help is still needed, asks the instructor. Does make sure to get help when needed ❑ Works to fullest potential and strives towards continuous improvement.			
Productive Class Member ❑ Is an attentive listener. ❑ Displays a positive attitude. ❑ Actively participates in class discussions. ❑ Helps others and is not a source of distraction. ❑ Comes to class prepared with required materials.			

Grading Period: _____ Total Score: _____

Rubrics not only help with **teacher clarity** but **Rubrics** also provide students with valuable information about the degree of which a specific learning outcome has been achieved. They provide students with **concrete feedback that displays areas of strength and areas in need of improvement**. Students can use this feedback as a tool to further develop their abilities

Budget/Supplies

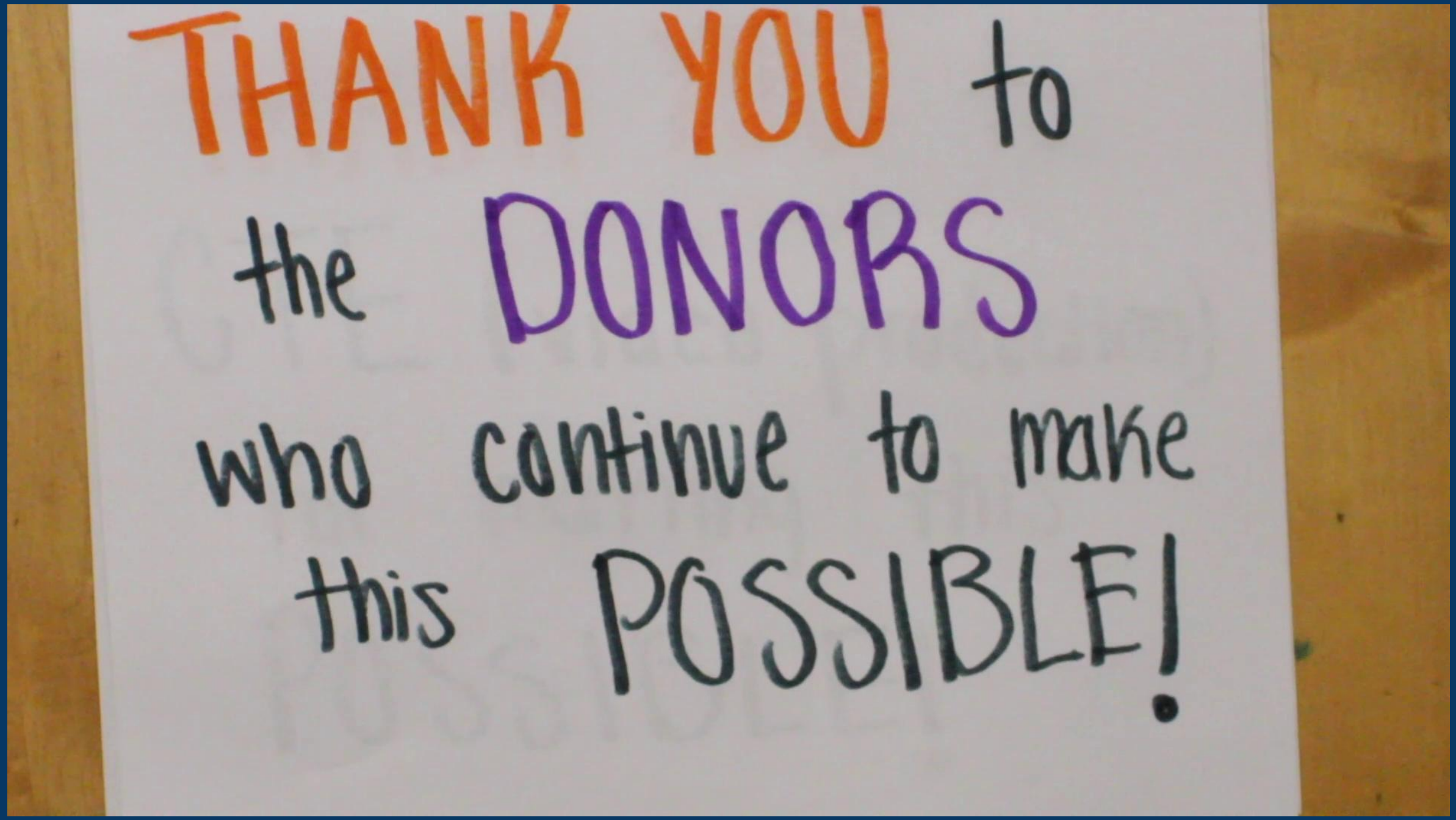
<u>lab equipment one time and on going</u>
freezer, refrigerator,
water bath, scales, autoclave
gel electrophoresis boxes,
vortexes, centrifuges,
pipettes and pipette tips
microwaves, centrifuge tubes, microtubes,
alcohol, rennin, chymosin, DNA necklaces,
agarose, imaging equipment

- transportation for field trips

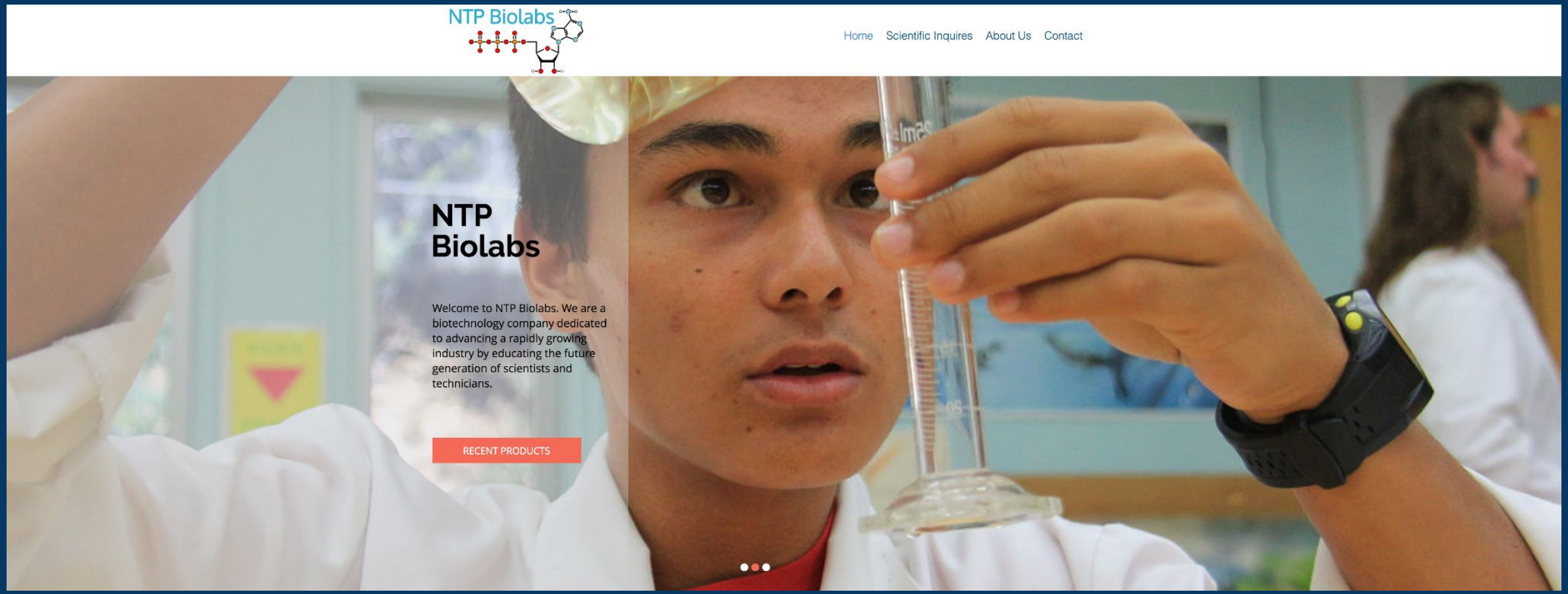
<u>Hands on lab materials</u>
Crispr Kits
DNA fingerprinting materials
Organisms for dissection
GMO primers and reagents
DNA extraction labs
Crime Scene DNA samples
gloves
cleaning agents
bacterial transformation lab

Student Produced PSA

The following videos were created as a collaboration between the CTE Biotechnology class and the CTE Video Production class.


THANK YOU to
the DONORS
who continue to make
this POSSIBLE!

Student Produced Class Website



[Website link]

Computer Science

Information and Communication Technologies

~ Scott Keller & Joseph Chanin-Meiers

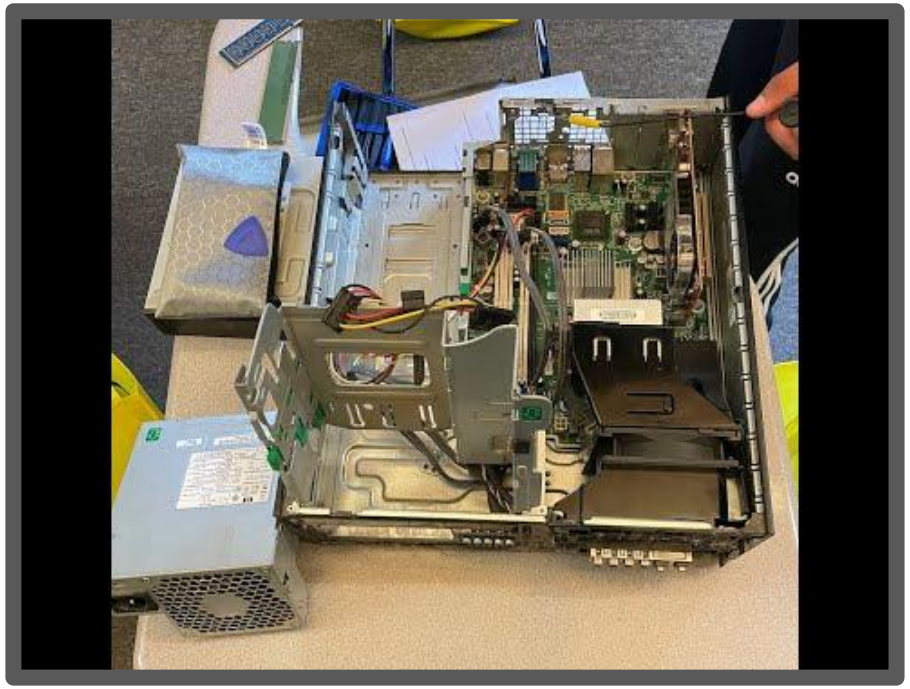
COE, Harbor

SCHS: Intro & AP Computer Science

- Focus on critical thinking, problem solving, coding, and more
- CodeHS - high school coding curriculum comprised of tasks and projects for beginning, intermediate, and advanced computer science students
- Computer Science project highlights

COE Pathway & Curriculum Info

- Cybersecurity and Networking Pathway
  - CIS 71 IT Essentials (1 Year articulated course)
  - CIS 71 Computer Fundamentals/CIS Fundamentals of Computer Security
    - Prepare for A+ Certification
- Curriculum fully aligned with Cabrillo College
  - Instructor required to complete CISCO IT Essential Certified Instructor Western Academy Support and Training Center
  - CISCO Net Academy IT Essentials Version 7 (also used by Cabrillo)
  - Standards connection to curriculum
- Santa Cruz COE funded through Strong Workforce Round 2 grant
  - Guided by data provided by Santa Cruz Workforce
  - Instructor, curriculum, facilities, hardware, events
    - Cyberclub, Think Big! Series, CSEdweek, CS Personal Learning Community
- CTE Pathway
  - Cabrillo aligned curriculum/ college credit
  - Student professional portfolio develop and participation in Digital NEST's NEST Flight
  - Student participation in ICT Career Panels and Guest Speaker opportunities through partnership with Your Future is our Business
  - Free Santa Cruz Works memberships provided to students
  - Future plans of expansion
    - Student site technology teams
    - Include additional pathway (Information Support and Services Pathway



Computer Science Standards

Standard: 9-12S.CS.2

- Content Area: Computer Science; Category: Computing Systems
    - Standard: Categorize and describe the different functions of operating system software.

Standard: 9-12.CS.2

- Content Area: Computer Science; Category: Computing Systems
    - Standard: Compare levels of abstraction and interactions between application software, system software, and hardware.

Standard: 9-12S.NI.3

- Content Area: Computer Science; Category: Networks & the Internet
- Standard: Examine the scalability and reliability of networks, by describing the relationship between routers, switches, servers, topology, and addressing.

Computer Science Standards

- Standard: 9-12S.NI.4
- Content Area: Computer Science;Category: Networks & the Internet
- Standard: Explain how the characteristics of the Internet influence the systems developed on it.

Standard 9-12.NI.6

- Content Area: Computer Science; Category: Networks & the Internet
  - Standard: Compare and contrast security measures to address various security threats.

Standard 9-12.NI.7

- Content Area: Computer Science; Category: Networks & the Internet
- Standard: Compare and contrast cryptographic techniques to model the secure transmission of information.

Assessment & Portfolios

Formative Assessment

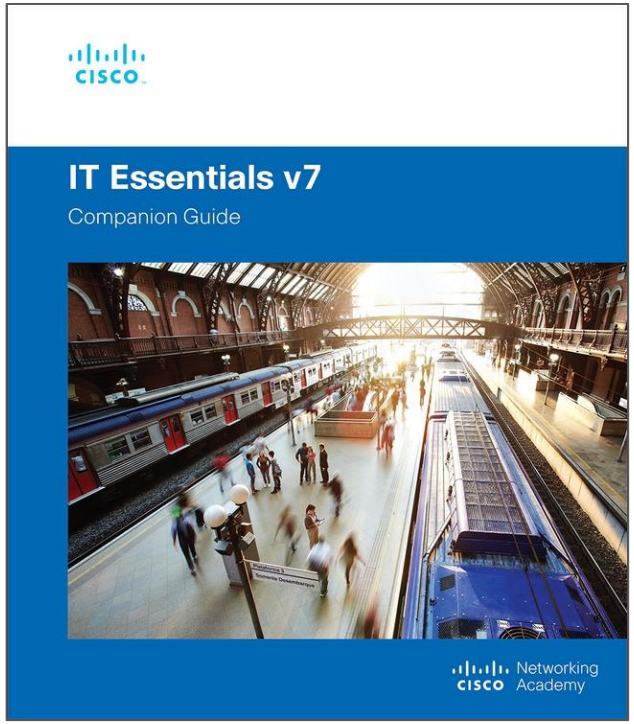
- Cisco Certified Chapter Quizzes and Exams
- Final Exam
- Cisco Certified Labs

Summative Assessments

- Student Portfolios
- Research Project
- Optional Computer building project

Portfolios

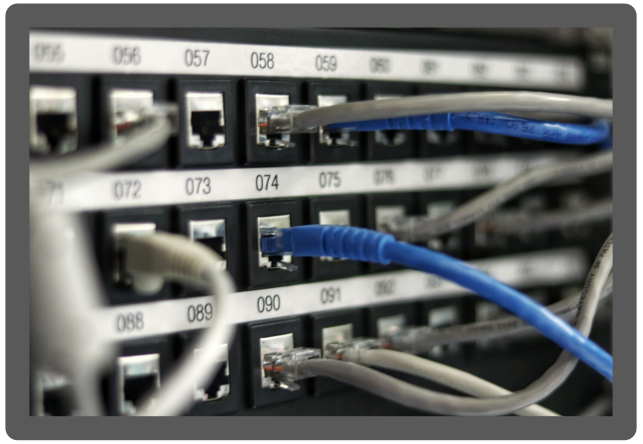
- Career based foundations (Cover Letter and Resume)
- Student Goals (Course-related and Professional)
- Celebration of projects
- Participation in end of year reflection



Work Based Learning Opportunities

Future of Work Based Learning Opportunities :

- Digital NEST
- Cruzio
- Cloud Brigade
- Pilot City
- Cabrillo



Bike Tech

Transportation

~Justin Smith
Harbor, Santa Cruz, Soquel High

Pathway & Curriculum Info

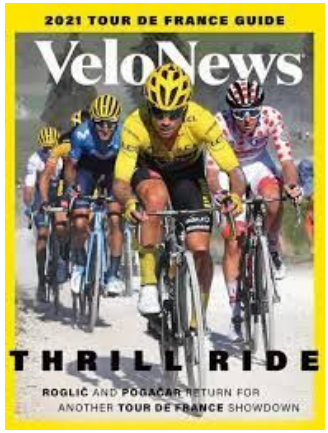
- Introductory and Advanced Bicycle Technology
- Partners include: Project Bike Tech, Specialized, Giant, and Shimano.
- Industry recognized certificates and Technician Training Certification offered by Shimano.
- Advanced students create personal projects including usable technology.

SHIMANO T.E.C.
TECHNOLOGY EDUCATION + CERTIFICATION

PROJECT BIKE TECH

Work based Learning: Speakers

- Olympic Track Cyclist and Personal Gold Film maker Adam Laurent
- Bell Helmets Project Manager Simon Fisher
- Gu Nutrition Sponsor and DK Winner Yuri Hauswald
- Kona Bikes Athlete Manager Barry Wicks
- Velonews Editor and Chief Fred Dreier
- Tour of Scotland Winner Leah Thomas



BELL

KONA

GU™

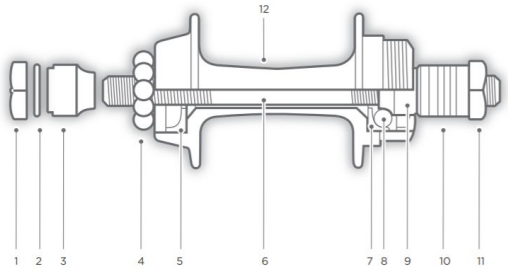
Assessment & Portfolios

We had a week off for thanksgiving break and spent some time with my family but this week we are back in school. This was my first weekend as a mechanic at Family Cycling Center. I worked monday, saturday and sunday. All three days working there I didn't find myself bored or trying to find something to do. I was busy the whole time. While working there I noticed that the other mechanics had their own portable tool boxes that had foam cut outs so they could slide their tools into to keep safe. I need one.

NAME:_____DATE:_____PERIOD:____SCHOOL:_____

BIKE TECH IN SCHOOL

BIKE HUB DIAGRAM QUIZ



BRAKE SKILLCHECK

BIKE TECH IN SCHOOL

TASK#	SKILL	DIRECTIONS (HOW DO I DO THIS?)	SIGNED OFF
1	WHEEL INSTALL & ALIGNMENT CHECK (PART 1)	1. Install wheel(s) 2. Make sure that the wheel is DISHED correctly and CENTERED in the frame or fork, by opening the quick-release and lifting the wheel ALL THE WAY into the bottom edges of the DROP-OUTS. (NOTE: This can also be achieved by setting the bike on the floor and opening and closing the quick-release. Gravity will set the axles evenly into the bottom edges of the dropout). 3. Now, the wheel should be centered in the frame (REAR) or fork (FRONT). Check this by examining the gaps between the rim and the frame/fork. These gaps should be equal. If they are not, move on to STEP 2, if they are, move on to step 3. **NOTE:** If the wheel is not sitting straight in the frame/fork, the brake will not work well, so don't waste your time adjusting a brake to a wheel that is not true and dished!	
2	WHEEL INSTALL & ALIGNMENT CHECK (PART 2)	1. RE-TRY opening the quick-release and lifting the wheel ALL THE WAY up into the bottom edges of the axle slots in the DROP-OUT. If you feel the wheel shift up on either side when you open the quick-release, then that was probably the problem, and the wheel should now be centered. 2. RE-CHECK the gap between the rim and the frame/fork. If it looks good, move on to step 3. If not, the DISH, FRAME or FORK may be out of alignment. CHECK THE DISH FIRST. If things are not aligned after checking/fixing the DISH, see the instructor for help.	
3	DISCONNECT CABLE & HOUSING	1. Remove the noodle from the noodle holder, or quick-release. 2. If there is a cable tip crimped on the end of the cable, cut it off. 3. Loosen the cable clamp bolt and slide the cable out from under the clamp. 4. Remove the cable and housing from the bike so that they are out of your way. You will need to align the slots on the barrel adjuster with the slot on the lever in order to completely remove the cable from the lever. Set the cable/housing on your bench along with the noodle and boot.	

PROJECTBIKETECH.ORG

Ronan Simkins

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Soquel, CA 95073
(831)-588-7988
simkinsronan@gmail.com

EXPERIENCE

Chipotle, 1955 41st Ave Ste A5, Capitola, CA 95010 — *Crewmember*

Nov 2020 - PRESENT

Crewmembers took over all basic activities around the store

Including: Cashier, Grill worker, Cleaning duties and Lineworker

EDUCATION

Soquel High School, 401 Soquel San Jose Rd, Soquel, CA 95073 — *Graduate 2022*

General Gpa is around 3.5 and have taken many CTE Programs Including: Woodshop, Metalshop and Bike Tec.

SKILLS

Keeping calm under pressure

Ability to pick up new tasks and learn fast

Very good with computers and many skills attributed with technology

Good people person and enjoy communication

AWARDS

Passed Honours world history

LANGUAGES

Fluent English

Partial Spanish

Link

Students in action

Work-Based/ Leadership Opportunities

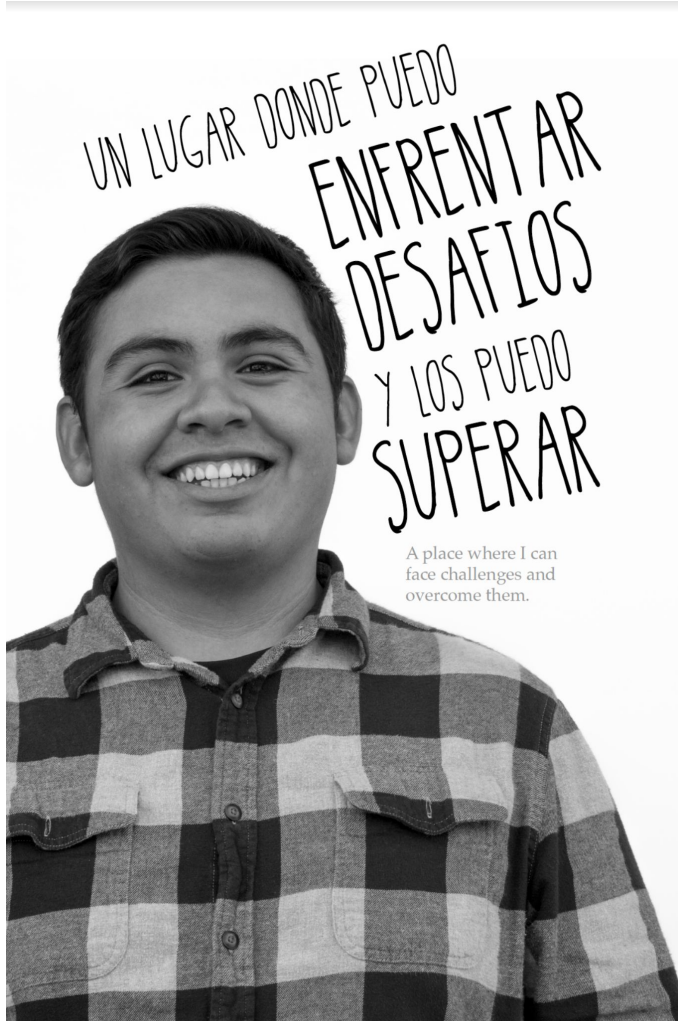
Photography & Graphic Design

Arts, Media, Entertainment

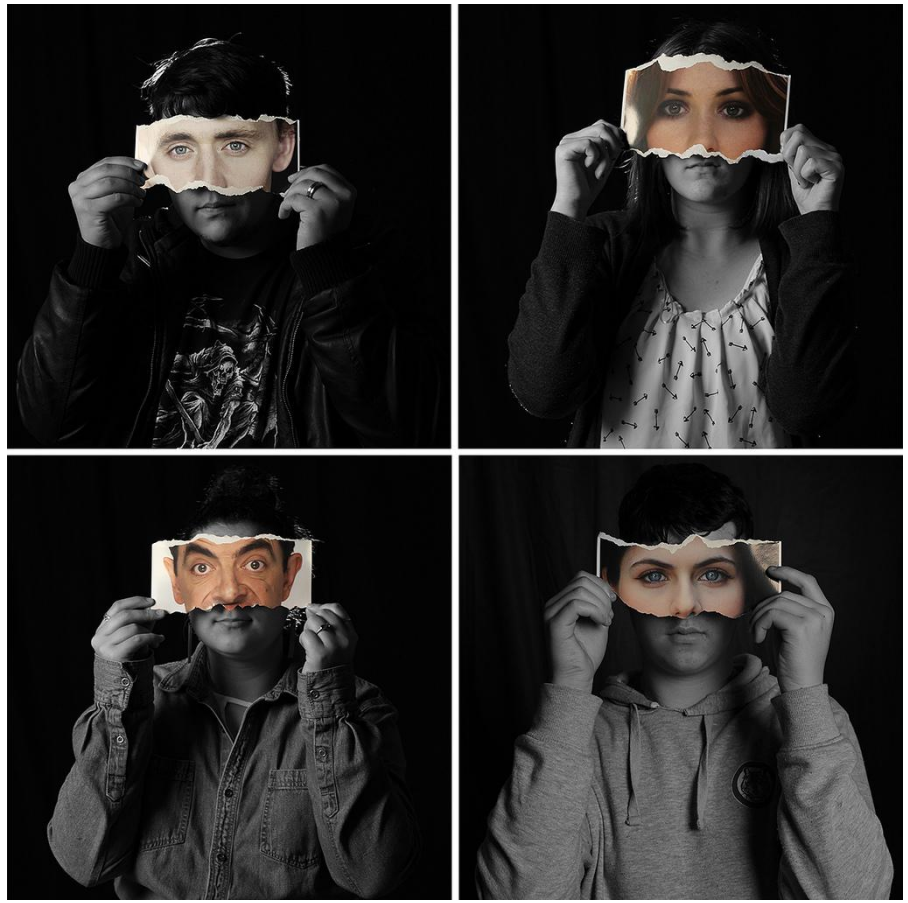
~Marco Lucadano
Soquel High

Sample projects

Cross disciplinary collaboration between Photography, Graphic Design, English, Spanish, and Health classes. Culminating in a school mural project.



Budget/supplies



What is the measure T and Perkins money used for?

- Screen printing supplies
- Poster printing and display
- Cameras
- Tablets
- Portfolio supplies
- Art supplies

Portfolio

2630 Portola Dr, Spc #1
Santa Cruz, CA 95062
(831) 334-0208
kzavala901@gmail.com

Kevin Zavala

April 17, 2018

To whom it may concern,

My name is Kevin Zavala and I am a junior at Harbor High and part of the graduating class of 2019. Ever since I was young I enjoyed reading comic books and being mesmerized by the illustrations. Now, as a student in CTE Graphic Design, I'm ecstatic to be able to learn the process of many of those artists.

Throughout my high school career, I have thoroughly enjoyed classes relating to the fine arts, such as Drawing and Painting , CTE Graphic Design 1 and Graphic Design 2. I've always been drawn to the arts because I believe that it's one of the easiest ways to express myself, as well as relax; I know that when I begin a project, everything around me begins to fade away and it's just me and the canvas. My love for the arts has made me realize that I want to pursuit a career in Graphic Design because it combines my love of art and creativity as well as the infinite possibilities that technology offers.

In my current Graphic Design class I've worked with the Adobe Creative Suite and have become very familiar with all the elements and principles that go into creating a praiseworthy piece of art. I've learned of the tremendous effect that type and alignment have on a piece, as well as how a color scheme can either make or break a piece. Furthermore, I've also learned that while design is about creativity, the client decides the parameters of the piece, so it's essential to follow their guidelines, as well as being able to manage time to meet their requirements by the deadline.

In the following pages are some examples of pieces that I am particularly proud of, as well as a list of references. This portfolio serves as a reflection of my creativity and love of design so I hope you enjoy them as I have enjoyed creating them.

Sincerely,

Kevin Zavala

2630 Portola Dr, Spc #1
Santa Cruz, CA 95062
(831) 334-0208
kzavala901@gmail.com

Kevin Zavala

OBJECTIVE

I am a high school student who is planning for a future in digital media. I enjoy thinking ahead and having a plan so that my work will satisfy clients and leave them considering me for further projects. My in depth understanding of Photoshop and Illustrator allows for outstanding quality projects, and I'm always open to new programs and tools to impress my clients.

EXPERIENCE

Boys and Girls Club, Live Oak Santa Cruz —Jr. Staff

Summer 2016 & 2017

Facilitate activities for Boys and Girls Club members as well as well as kitchen management.

EXTRA CURRICULARS

Precalculus Club President — *Harbor High School*

2017-2018

A club dedicated to providing support with the challenging material of Pre Calculus

EDUCATION

Harbor High School, Santa Cruz—

Class of 2019

4.12 GPA

Drawing and Painting	2015-2016
ROP Graphic Design 1	2017-2018
ROP Graphic Design 2	2018-2019

SKILLS

Efficient time manager

Well organized

Open to criticism

Dedicated to pleasing clients

TECHNICAL SKILLS

Photoshop

Illustrator

Indesign

AWARDS

Perfect Attendance

2015-2017

Academic Success

Maintained a 4.0 GPA and higher through my first and second years of high school

LANGUAGES

*English

*Spanish

Assessment

Resume Rubric

Career Skills Rubric

Jazlyn Piera

329 Nobel Drive, Santa Cruz, CA

Mobile: (831) 588-2226 | jazlynpiera@gmail.com

Education

Harbor High School — Santa Cruz, CA, 2021

GPA: Weighted: 4.16 / Unweighted: 4.0

Relevant Coursework: American Government Honors, Yearbook, AP Lit & Comp, AP Calculus

Experience

Theater Member — SCHS Theater / HHS Theater / CMTSJ, CA

Performer & Stage Manager — 2017-2021

- Performed in leading roles in ten plays and musicals throughout high school. Demonstrated and honed singing, dancing, and acting skills.
- Stage managed a tech crew of over eight people at Santa Cruz High. Called the show from backstage, including directing set changes and cueing lights and sound.

Yearbook Editor — Harbor High School, CA

Design Editor — 2021

- Developed the school yearbook as well as collaborated with and managed other yearbook staff. Created over ten original two-page spreads in addition to editing and proofing all other pages in the 176 page book to create a cohesive design.
- Used journalism skills including photography and interviewing to virtually research and investigate school activities. Also connected with the student body to produce a yearbook that accurately represented school life during the pandemic.

Awards / Honors

- **Best New Runner Award** — 2017-2018 Season

  Received award from Coach Greg Brock for filling in as a Varsity Cross Country runner, earning the girls team first place in Central Coast Sectionals.
- **Santa Cruz Art League** — 2018

  Awarded 2nd Place for crafting a metal butterfly pendant and necklace. Showcased exceptional jewelry and metalworking skills.

Additional Skills

- Proficient in graphic design programs such as Adobe Illustrator, Photoshop, and InDesign.
- Well versed in arts and crafts including advanced sewing, knitting, crocheting, embroidery, cross stitching, painting, jewelry design and metalworking, and wire wrapping.
- Tennis, Piano, Guitar, Skiing, and Roller Skating

Do you ever wonder what happens when a fish swims around in trash-laden waters?

Seafood eaters digest up to 11,000 pieces of microplastic per year.

SAMPLE PROJECT

SANTA CRUZ CONSERVATION POSTER

06

In March, the Environteers Association requested students across the county to design a poster urging citizens to protect and restore the Santa Cruz environment. I took the opportunity to design a poster of my own. After sketching out a dozen or so concepts, I judged that my poster should focus specifically on marine pollution. A statistic and a bag of trash later, I completed a design unlike any other submitted to the Environteers. It took me several hours to arrange an eclectic bundle of plastic caps, wrappers, zip ties, and other miscellaneous items into the shape of a Coho Salmon. I was not satisfied with the images I captured of my trash fish until the 158th shot. It took an additional hour to properly format the poster in Illustrator, as I could not decide on the fonts to use or the orientation of the canvas.

Work Based Learning Opportunities

Students participate in competitions to create products for the community. Cross disciplinary collaboration is invited and encouraged.

LANGUAGE AMBASSADORS

50th ANNIVERSARY HARBOR HIGH Pirates

CSI
Santa Cruz County Office of Education
County Science Intiative

Work Based Learning Opportunities

Students participate in competitions to create products for the community.
Cross disciplinary collaboration is invited and encouraged.

CTE AME Graduates

Jack Vidnovic · 1st

Product Designer at Apple

Teal Owyang · 1st

General TD at Walt Disney Animation Studios

Los Angeles, California · 500+ connections · Contact info

Sam Shimizu-Jones · 1st

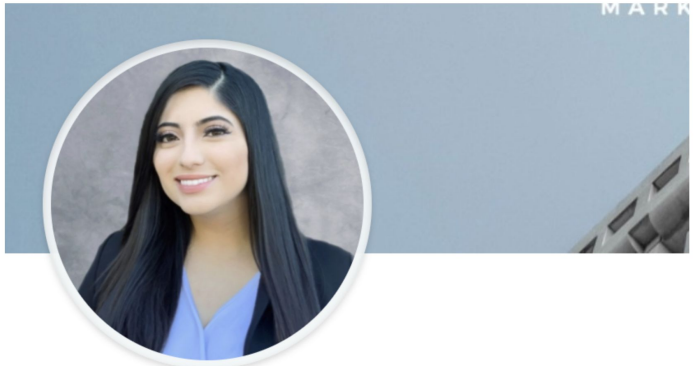
Documentary FIlmmaker

Aaron Miyashita · 1st

Editor | Cinematographer

Christopher Teague · 1st

Visual Designer at Looker



Ruth Mendoza · 1st

Marketing & Communications Specialist

Kelsey Doyle · 2nd

Art Instructor at Stanford Continuing Studies

Cristina Stief · 1st

Senior Social Media and Content Manager

Mill Cabinetry/ Construction

Building & Construction

~Peter Boscacci
Harbor & Santa Cruz

Pathway & Curriculum Info

Industry Sector: Building and Construction Trades
Pathway: Cabinetry, Millwork & Woodworking

- Introduction to Woodworking, Cabinetry & Millwork - Course Outline
- Advanced Woodworking, Cabinetry & Millwork - Course Outline

- Curriculum has been aligned with and developed adhering to the California CTE Knowledge and Performance Anchor Standards (KPAS) as listed in the Course Outlines. Course content has been developed from various sources including State requirements, collaboration with colleagues and industry partners, personal industry experience and teaching experience.

Funding Sources and Uses

Annual Funding Sources: SCHS and Harbor <u>Combined</u>

- Perkins - $3,760.00
- Measure T - $6,132.00

Current Class Size:

- 30 students per semester at SCHS (60/year)
- 24 students at Harbor

Funds are used for:

- Materials - Lumber & Consumables
- Equipment repair and maintenance
- Equipment - New
    - Replacement of unusable/outdated equipment
    - Purchase of new equipment to maintain current industry trends, safety & standards
        - CNC (Computer Numerical Control) Routers / Laser Cutting Machines

SCHS and Harbor High Woodshops

Santa Cruz High

Harbor High

Leadership Development

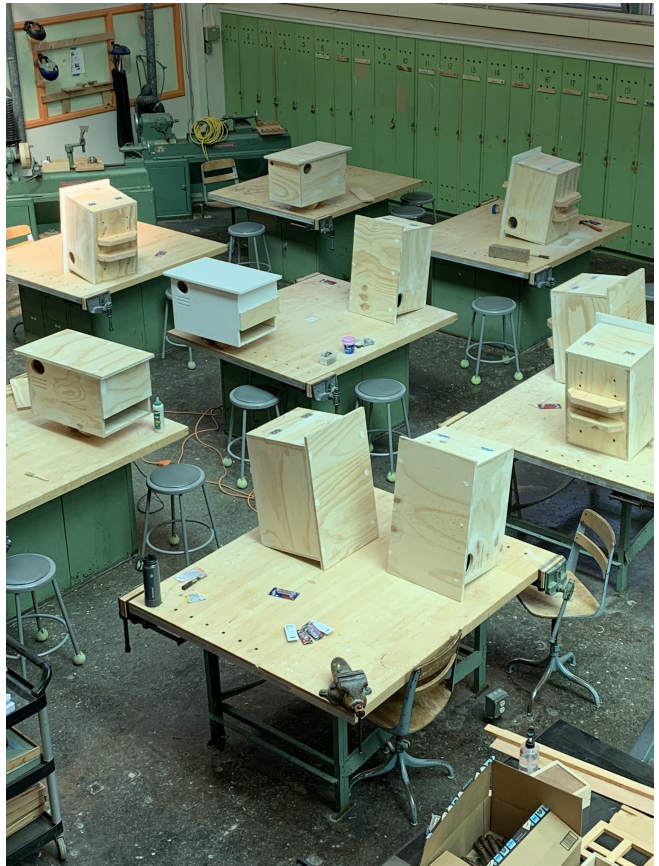
- Each class will be involved in at least one community focused project. These projects will typically be designed to provide a local non-profit organization with needed project assistance as determined by the teacher.

- These projects are designed to develop individual and group growth and responsibility.

- Learning outcomes include:
  - Goal Setting
  - Time Management
  - Team Collaboration
  - Leadership Opportunities
  - Task Definition and Delegation
  - Planning and Organizing a Community Event

Past and Ongoing Community Projects

Barn Owl Nesting Boxes -
Native Animal Rescue Organization - Santa Cruz
Collaboration with UCSC PBRC - Predatory Bird Research Group
[Pajaro Levee Raptor Pilot Study]



Owl Nesting Box installed at the Civic Auditorium

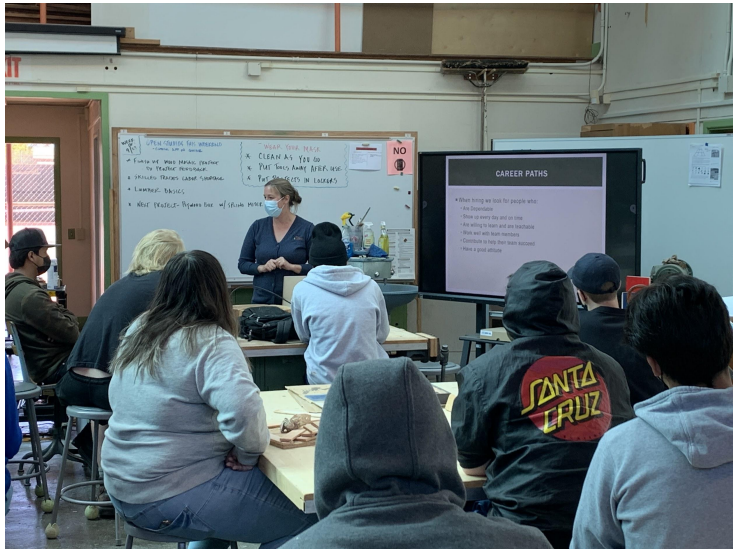
Past and Ongoing Community Projects

Little Free Libraries -
Live Like Coco Foundation - Santa Cruz

Anna Jean Cummings Park - Filling the Library with Kate Paveo & Supervisor Leopold

Leo’s Haven Playground - Live Oak

Work Based Learning Opportunities



Michelle Webb - Marketing Manager - Big Creek Lumber Co.

- This recent talk focused on opportunities with Big Creek from retail sales to forestry management.

David Wright - Operations Manager - Elements Manufacturing

- Mr. Wright discussed the opportunities in the Architectural Millwork industry. He focused on their core business, opportunities for those interested in CAD, installation, CNC operations and customer interface.

Assessments

Assessments are completed through a series of written and performance evaluations with respect to safety and tool use.

Individual projects are assessed on various criteria included in a rubric, which is adjusted as the class progresses to reflect the level technical knowledge and skill needed. Projects are scaffolded, each one building on a technique or skill learned from a previous project. In addition to my assessments, each project is accompanied by a “Project Feedback” exercise which asks for a detailed description of the project, new techniques learned and a self assessment on how they could improve the outcome if needed.

Group projects are usually self assessed with a more detailed “Feedback” which includes each students’ role, delegation of duties, conflict resolution, adherence to a plan, attention to detail, etc.

Work Samples

Bandsaw Box, Spline Miter Box, “Drunken” Cutting Board, Turned Bowl, Tortilla Press, Wood Mosaic, Lathe Turned Pens, Stool, Cribbage Board, Cutting Board with Inlay

Sustainable Agriculture

Industry Sector: Agriculture and Natural Resources

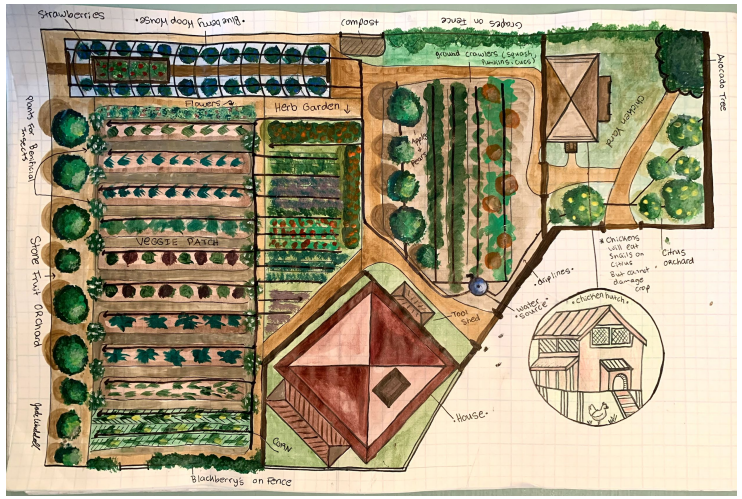
Pathway: Agriscience

Tom Bentley~Soquel High

Pathway

- Course Name: Sustainable Agriculture
- Pathway: Agriscience
- Schools: Costanoa and Soquel
- Classes:
  - Introduction to Sustainable Agriculture
  - Advanced Sustainable Agriculture
  - TA/Special Projects Class

Standards Aligned Curriculum Design Project



- ESS3.C: Human Impacts on Earth Systems: The sustainability of human societies and the biodiversity that supports them requires responsible management of natural resources.
- LS4.D: Biodiversity and Humans: Humans depend on the living world for the resources and other benefits provided by biodiversity. But human activity is also having adverse impacts on biodiversity through overpopulation, overexploitation, habitat destruction, pollution, introduction of invasive species, and climate change. Thus sustaining biodiversity so that ecosystem functioning and productivity are maintained is essential to supporting and enhancing life on Earth. Sustaining biodiversity also aids humanity by preserving landscapes of recreational or inspirational value.

CTE Collaboration:

- Construction Tech
- Floral Design
- Coming soon: Culinary Arts :)

Where does the money go?

SOQUEL NURSERY GROWERS

San Lorenzo
LUMBER & HOME CENTERS

EWING
Irrigation & Landscape Supply

CENTRAL HOME SUPPLY
Building Materials & Landscape Supplies

Funding Sources:
Measure T: $3,000
Perkins: $9,402

College and Career:

- Field Trips
- Guest Speakers
- Internships
- Post-Secondary Learning
- Leadership Opportunities

Questions?