

Middle School Foundations Academy Grant

Colina Middle School

A California Gold Ribbon School

March 2019

Establishing the MSFA

- One Time Matching Grant Monies \$25K
- Provide middle school students with CTE and career exploration and learning experiences
 - California Career Resource Network Lesson Plans (CalCRN)
 - (3) Career and Self Exploration Sequence of Courses
 - Industry Representation
 - Leadership Seminars



California Readiness Lesson Plans (CalCRN)

http://www.californiacareers.info/#Lessons

Lessons focus on academic vocabulary- Labor Market, Salary, Occupation

Youtube Start Up Video

Online Research - Occupations with the most job openings, fastest growing, level of schooling required

5th Grade - 5 Lessons (All feeder elem schools)

6th Grade- 5 Lessons (all elective classes)

7th Grade- 6 Lessons (all elective classes)

8th Grade- 6 lessons (all elective classes)

9th-12th Grade 6 lessons for each grade level /Naviance



Career and Self Exploration Sequence of Courses (3) ICT

Information and Communication Technologies

ICT is projected to grow 13% faster than the average of all occupations- Bureau of Labor Statistics

Cloud- Information Security- Data Collection

Align with CPA: Westlake High School ICT

Colina Academy Sequence of Courses:

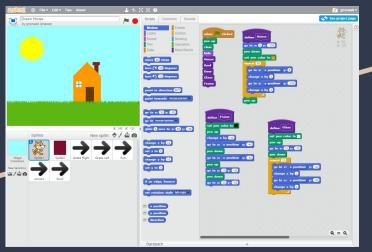
- 1. Software and Systems Development
- 2. Games and Simulations
- 3. Information Technology



Sequence 1

Software and Systems Development

6th Grade Elective Wheel



12 Week Career Wheel

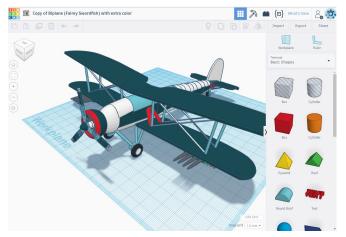
Scratch- visual programming concepts and game design using blocks

Tinker CAD- Introduction to 3D modeling

Art CAM- Introduction to vector graphics

Students will create physical models along using 3D printers, CNC machine and laser engravers.





Sequence 2

Games and Simulations

7th Grade Elective Wheel

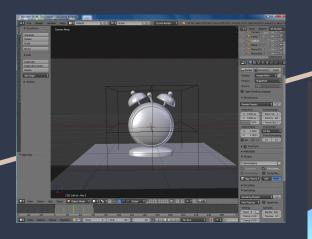


Develop gaming and programming concepts

Correlations between block programming (Scratch) and text-based (JavaScript & Python).

Game Design will use Unity to extend learning of graphics creation, character control and object oriented programming.

3D Modeling continues with Blender software and creation of physical models







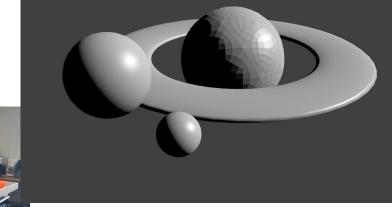
Sequence 3

<u>Information Technology</u>

8th Grade Advanced Classes

Yearlong courses aligned so students can enter WHS Computer Programming 1 and lead into Westlake's Academy of Game Design.

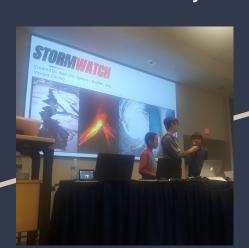
Students produce various projects from Blender Animations to redesign of Colina's CO2 racetrack.





Colina Accomplishments

 Only middle school participants in VCOE's Hackathon by the Sea



- Robotics program awarded twice for design in VEX competitions
- Team qualified for state competition for VEX IQ robots in only second year of the team





Only local middle school participating in Navy SeaGlide competition.



Industry Partners & Representation

Work-based learning opportunities to provide feedback on curriculum development, course implementation

Career Speakers, Demonstrations, Field Trips, Hands On Experience, Real Life Applications





Beyond Gravity Media







Girls in STEM

Girls from Westlake and Colina joined for a 1 day cybersecurity event hosted by VCOE and Bank of America.

Other events included: Tours of Haas Automation and D.W. Drums in Camarillo











Leadership Seminars

Educating for Careers

Investing in the Future



8 Leadership Seminars

- Background on courses
- Career readiness/exploration
- Quick start and implementation information

MSFA Structured Site Visits (Winter/Spring 2019)

- 4 full day events (middle and CPA High School)
 - Site visit, review projects/materials, talk to staff and students, barriers and best practices for implementation

2 full day events: Regional Workshops

- VCOE/VC Innovates
- 1 Full day event: Statewide Workshop presentation
- 1 hour Webinar (4-6) Information of MSFA



Matching Grant

\$25K Planning Grant

Hourly time for curriculum development, collaboration, professional development and Leadership Seminars \$16,385

Certificated Benefits/Costs \$3,197

Equipment/Supplies \$25,640

Travel/ Conference \$9,231

Indirect Costs 4.7% **\$1,125**

Grant **\$25,000**

Match **\$30,577**



Room 27



New Equipment



3D Printers





Cnc Station

