

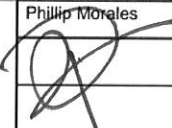
California Partnership Academy

2015-16 Annual Report

School Name:	Milpitas High
Academy Name:	Engineering and Technology Academy
Academy Number:	0431

Administrator Certification

I have reviewed the California Partnership Academy 2015-16 Annual Report, and I certify and support that the program information and student data are accurate and complete.

School Principal:	Phillip Morales
School Principal Signature:	
Date:	
Telephone:	408-635-2800
Fax:	408-635-2851
E-Mail:	

District Superintendent or Designee:	Cheryl Jordan
District Superintendent or Designee Signature:	
Title:	Interim Superintendent
Date:	
Telephone:	408-635-2600 X6013
Fax:	408-625-2616
E-Mail:	

Print and obtain signatures then mail this signature page to: California Department of Education, High School Innovations and Initiatives Office, CPA Annual Report Submission, 1430 N Street, Suite 4202, Sacramento, CA 95814.

Printed September 9, 2016

CA Partnership Academies Student Data Collection Test Web Site
0431 Engineering and Technology Academy
2015 Annual Report

Section 1: Contacts

School

School: Milpitas High
Address: 1285 Escuela Pkwy., Milpitas, CA 95035

School Principal

Name: Phillip Morales
Telephone: 408-635-2800 E-mail: pmorales@musd.org

Academy

Name: 0431 Engineering and Technology Academy
Year First Funded: 1999 Funding Source: General Funds Industry Sector: Engineering and Design

Academy Coordinator

Name: Jennifer Lowe
Title: Lead Teacher
Telephone: 408-635-2800 ext: 4032 E-Mail jlowe@musd.org

Academy Co-Coordinator

Name:
Title:
Telephone: - E-mail:

School Administrator Responsible for Academy

Name: Phillip Morales
Title: Principal
Telephone: 408-653-2800 E-mail: pmorales@musd.org

District Coordinator

Name: Andrea Hutchison
Telephone: 408-942-2781 E-mail: ahutchison@mhsacademy.org

0431 Engineering and Technology Academy2015 Annual Report

Section 2: Academy Model

1. State funds provided by the partnership academy program are only used for the development, operation, and support of partnership academies.

Yes

2. Academy classes are restricted to academy students (academy pure classes).

No - Explanation: All academy elective classes are pure, but due to an impacted school, core classes have some non academy students.

3. Academy classes are scheduled in a cluster, whenever possible, to form a school within a school.

Yes

4. Indicate your school's schedule:

6 period day

5. Academy teachers volunteer and work as a team in planning, teaching and trouble-shooting program activities.

Yes

6. A second planning period is provided for the lead teacher in addition to the normal planning period for program development, implementation and improvement.

Yes

7. Source of Funding for extra prep period:

Academy grant funds

8. Academy teachers have a common planning period during the school day to exchange student and educational information.

Yes

9. Describe the academy-specific support systems and other strategies in the academy that assist students in meeting the desired student outcomes of increased attendance, increased academic achievement, and progress toward graduation.

Other - Explanation: Teachers meet on a weekly bases to review students attendance, academic progress, and behavior. A tracker is also in place that monitors students grades and once a student drops below 70% the student is brought in for a conference and to create an academic improvement plan. Tutoring is offered before, during, and after school. Students, also meet at least twice a year with their counselors to track progress towards graduation.

10. List the industry certifications that students can earn while in the academy program.

Explanation: After a failed attempt at implementing the AutoCAD certification, we have turned to a boarder industry certification that covers skills that are required across our industry sector.

11. List the academy's additional motivational activities with private sector involvement that encourage student academic and occupational preparation.

Explanation: Students in their 11th grade year participate in two job shadows. In addition several guest speakers from our industry sector come and present to the students. Students are parred with a career mentor who helps them with their resume and college/career planning. All students also participate in the schools career week, where they pick what careers they would like to learn about.

12. According to your 10th grade student information, are 50% of your incoming students meeting the "at-risk" criteria?

Yes

0431 Engineering and Technology Academy**2015 Annual Report**

13. Describe your recruitment strategies to inform and engage students that could be "at-risk".

Explanation: All freshmen attend a presentation of the academy program during their PE class and a follow up presentation in their English or History classes. Academy projects are displayed outside of the academy classes to draw student attention. Recommendations are also taken from 9th grade teachers and counselors.

14. Students volunteer to participate in the academy.

Yes

15. Parent permission is obtained for student participation in the academy.

Yes

16. Integrated Curriculum: Give examples of how the career technical focus and academic applications are integrated throughout your academy courses and curriculum (i.e. project-based learning, integration of CTE into academic curriculum and/or academic standa

Explanation: Students participate in several cross curricular units including units on: The Industrial Revolution, WWII Technology, the Space Race, Business Plans, and Patents. We are continually working to included more integrated projects that included all of our core subjects and elective course.

17. Discuss academy successes during the past year.

Explanation: A new English teacher has joined our team. Our new advisory board is continuing to grow with several new members thanks to our connection with the Milpitas Chamber of Commerce. We are now articulated with two local community colleges with a third in the works. We have created a new students leadership team within the academy that has helped the students feel they have an active voice in the program. Our female student body has started to take an interest in the program and we are almost at 20%.

18. Discuss academy challeges during the past year.

Explanation: Had a new member on our teacher team. We had the largest number of juniors ever, not passing classes. We tried several different interventions, but their lack of motivation was truly surprising. We also encountered some difficulty this year during recruiting. We discovered that some staff members were trying to encourage students not to participate in our program since it conflicted with their own program, resulting in a lot of false information spreading about the program.

0431 Engineering and Technology Academy**2015 Annual Report**

Section 3: Business and Community Partners

Company / Organization	Representative Name	Position	E-mail	Telephone
A10 Networks	Brett Littrell	Principle Network Architect	blittrell1@gmail.com	408-325-8668
City of Menlo Park	Cherise Brandell	Community Service Director	cebrandell@menlopark.org	650-330-2200
Junior Achievement	Sharon Preston	Senior Program Manager	jmendoza@janorcal.org	408-398-0129
iCould Be	Denevia Archer-Mullings	Program Manager	Denevia@icouldbe.org	646-734-9284
LSI Logic	Kevin Gailagher	Engineering Consult	kgallagh@sil.com	408-433-7428
The Tech Museum of Innovation	Bill Bailor	Asst to Museum Director	hr@thetech.org	408-294-8324
Juniper Networks	Eric Lane	Outreach	ericlane@juniper.net	408-936-0268

0431 Engineering and Technology Academy

2015 Annual Report

Section 4: Postsecondary Partners

Postsecondary Institution	Institution Type	Participation
Evergreen College	Community college	Curriculum Development, Course Articulation, Tutors
Mission College	Community college	Curriculum Development, Course Alignment, Course Articulation, Dual Credit Courses, College Readiness Preparation
Ohlone College	Community college	Curriculum Development, Course Alignment, Course Articulation
San Jose State	UC/CSU	Speakers, Field Trips, Curriculum Development
Santa Clara University	Other 4 year college	Speakers, Field Trips, Curriculum Development, College Readiness Preparation



CA Partnership Academies Student Data Collection Test Web Site

0431 Engineering and Technology Academy

2015 Annual Report

Section 5: Advisory Committee

CA Partnership Academies Student Data Collection Test Web Site

0431 Engineering and Technology Academy

2015 Annual Report

Company / Organization	Representative	Position	E-mail	Telephone
CSharp Video Production	Christina Ann	Owner	christine@csharpvideo.com	408-758-8293
Life by Design	Liz Ainsworth	Owner	liz_ainsworth@yahoo.com	408-935-8338
Dell Computers	Matthew Ainsworth	Sales	matthew_ainsworth@yahoo.com	510-825-3612
Cisco Systems	Ricardi Benavidez	Manager	ricardob@cisco.com	408-525-0602
Spring Valley Golf Course	Alyssa Cicero	Manager	acicero@springvalleygolfcourse.com	408-262-1722
Linear Technology Corp	Paul Coghlan	Manager	mjohnson@linear.com	408-432-1900
Dawson's Advanced Machining Network	Kenten Dawson	Owner	dawsoninvestments@hotmail.com	408-667-9229
PG&E	Amanda Egan	Consumer Relationship Mgr	amanda.egan@pge.com	408-282-7430
Milpitas High School	Olga Eidelman	Teacher	oeidelman@musd.org	408-635-2800
Sandisk Corporation	Kevin Gatto	Manager	kevin.gatto@sandisk.com	408-801-1000
School Loop	Mark Gross	Owner- CEO	mark@schoolloop.com	510-251-1826
Comcast Business	Francisco Hernandez	Area Manager	francisco_hernandezjr@cable.comcast.com	408-309-9611
Milpitas E-Waste	Eddie Inamdar	Manager	eddie@recycle1234.com	510-468-2642
Milpitas PTA	Robert Jung	President	robert.jung@milpitaspta.net	408-635-2800
Juniper Networks	Eric Lane	Manager	ericlane@juniper.net	408-936-0268
Milpitas High School	Cheryl Lawton	Principle	clawton@musd.org	408-635-2800
City of Milpitas, Mapping Engineer	Ron Long	Manager	tracegis@gmail.com	408-586-3335
Milpitas High School	Jennifer Lowe	Teacher	msjlowe@gmail.com	408-635-2800
Snelling Staffing Services	Bob Murry	Manager	bob.murray@snelling.com	408-934-9095
Bay Area Tutoring Association	Chris Norwood	Owner	chris.norwood@bayareatutor.org	408-945-8003
Milpitas Unified School Board	Robert Nunez	School Board Member	munez@musd.org	408-635-2600
Milpitas High School	Bob Smith	Teacher	bsmith@musd.org	408-635-2800
Google	Greg Teather	Senior Software Engineer	gteather@gmail.com	425-761-5692
Boing Inc.	Kathryn Teather	Electrical Engineer	teather.kathryn@google.com	425-225-5600
Zollner Electronics	Stephan Weiss	Manager	stephan_weiss@zollnerelectronics.com	408-434-5400

0431 Engineering and Technology Academy**2015 Annual Report**

Section 6: Courses and Curriculum**9th Grade Courses and Curriculum****Category:****Title:****Teacher:****Industry Sector:****A-G Status:****Dual Credit: Articulation Agreement:****10th Grade Courses and Curriculum****Category: Academic 1****Title:** World History**Teacher:** Jennifer Lowe**Discipline:** History**A-G Status:** A History**Dual Credit:** No **Articulation Agreement:** No**Category: Academic 2****Title:** English II**Teacher:** Brian McGarry**Discipline:** English**A-G Status:** B English**Dual Credit:** No **Articulation Agreement:** No**Category: Academic 3****Title:** Math II**Teacher:** Olga Eidelman**Discipline:** Math**A-G Status:** C Mathematics**Dual Credit:** No **Articulation Agreement:** No



CA Partnership Academies Student Data Collection Test Web Site

0431 Engineering and Technology Academy

2015 Annual Report

Category: Career Technical 1

Title: Intro to Engineering

Teacher: Bob Smith

Industry Sector: Engineering and Architecture

A-G Status: G College-Preparatory Elective

Dual Credit: No **Articulation Agreement:** Yes

Description: This is the Academy's introductory course into engineering. Students are exposed to both concepts and hands-on software tools to help prepare them for their engineering career. Emphasis will be on understanding the importance of accurate measurements, computer aided design basics, design brief in introduction and team work collaboration. Student will be introduced to Autocad and the Academy's 3D printer.

11th Grade Courses and Curriculum

Category: Academic 1

Title: US History

Teacher: Jennifer Lowe

Discipline: History

A-G Status: A History

Dual Credit: No **Articulation Agreement:** No

Category: Academic 2

Title: English III

Teacher: Brian McGarry

Discipline: English

A-G Status: B English

Dual Credit: No **Articulation Agreement:** No

Category: Academic 3

Title: Math III

Teacher: Olga Eidelman

Discipline: Math

A-G Status: C Mathematics

Dual Credit: No **Articulation Agreement:** No

0431 Engineering and Technology Academy**2015 Annual Report**

Category: Career Technical 1**Title:** Exploring Engineering**Teacher:** Scott Keller**Industry Sector:** Engineering and Architecture**A-G Status:** G College-Preparatory Elective**Dual Credit:** No **Articulation Agreement:** Yes

Description: Through a series of hands-on projects, activities and computer integrated instruction, students will explore the world of design as it applies to Green Energy Engineering. We use the same programs and tools used by business and industry - AutoCad, AutoCad Inventor, and Sketch Up. Student will learn to design projects, create prototypes, and prepare drawings to industry standards so the product can be manufactured.

12th Grade Courses and Curriculum**Category: Academic 1****Title:** Economics**Teacher:** Jennifer Lowe**Discipline:** History**A-G Status:** G College-Preparatory Elective**Dual Credit:** No **Articulation Agreement:** No**Category: Career Technical 1****Title:** Engineering Focus**Teacher:** Scott Keller**Industry Sector:** Engineering and Architecture**A-G Status:** G College-Preparatory Elective**Dual Credit:** No **Articulation Agreement:** Yes

Description: This course serves as the final of a sequence of college preparatory, career-technical education courses. The purpose of this course is to provide students knowledge, skills, and values associated with sustainable urban design. This 12th grade CTE course will build on that knowledge, educating students about the green technology, health and structure of their larger community. They will be able to apply the principles they learn to making one aspect of their community more sustainable

0431 Engineering and Technology Academy
2015 Annual Report

Section 7: School-District Match

A. Average non-academy class size	36
B. Average academy class size	28
C. Average annual school district teacher cost per teaching period	17,079
D. Academy periods	6
E. Extra Preparation Periods	(None)
1. Cost for reduced academy class size total	\$22,544
2. Cost for instructional assistants/clerical support	\$6,240
Explanation: 4 hours a day cost divided between all 3 academies on campus	
3. Cost for verifiable administrators/counselors time working	\$10,650
Explanation: \$75 per hour x 7 hours x 4 days x 4 admin (\$8,400)	
\$75 per hour x 15 hours x 2 counselors (scheduling and counseling) (\$2,250)	
4. Cost for staff development	\$4,375
Explanation: Equity Project Staff Development \$800 x 5 teachers	
Illuminate data training (\$375)	
5. Cost of other forms of school site or district support	\$83,820
Explanation: \$4000 after school tutoring program	
\$1,800 Career Locker planning	
\$5,520 iCould Be Mentoring Program for 60 students	
\$22,500 Extended Computer Tech (IT) support \$75 per hour x 3 IT guys x 100 hours	
\$10,000 Perkins Funding	
\$40,000 New Laptop Computer Lab	
Total Match Required	\$81,000
Total Match Calculation	\$127,629

0431 Engineering and Technology Academy

2015 Annual Report

Section 8: Business-Community Match**1. Estimated value of Advisory Committee meetings.****Formula: (estimated hourly cost per member x number of members x hours per meeting x number of meetings.)**

Amount: \$11,250.00

Computation \$75 x 25 members x 3 hours x 2 meetings

Explanation:

2. Estimated value of classroom speakers.**Formula: (estimated hourly cost per speaker x number of speakers x avg. hours per speaker.)**

Amount: \$2,250.00

Computation \$75 x 5 hours per day x 6 speakers

Explanation:

3. Estimated value of activities involving business (e.g.: job shadowing.)**Formula: (estimated hourly cost per business representative x hours.)**

Amount: \$15,750.00

Computation \$75 x 2 coordinators x 10 hours x 3 job shadows (\$4,500)

Explanation: \$75 x 10 partners x 5 hours x 3 job shadows (\$11,250)

4. Estimated value of mentors.**Formula: (estimated hourly cost per mentors x hours involved in mentoring.)**

Amount: \$126,000.00

Computation \$75 x 60 students x 28 hours

Explanation:

5. Estimated value of field trip/study tour.**Formula: (estimated hourly cost per host/tour guide x hours involved.)**

Amount: \$5,400.00

Computation \$75 x 4 guides x 3 hours

Explanation: \$75 x 1 guide x 4 hours

\$75 x 3 guides x 2 hours

6. Estimated value of internships.**Formula: (estimated hourly cost per internship supervisor/trainer.)**

Amount: \$36,000.00

Computation \$1500 per supervisor for 24 internships

Explanation:



CA Partnership Academies Student Data Collection Test Web Site

0431 Engineering and Technology Academy

2015 Annual Report

7. Estimated value of other business partner activities, such as teacher internships, community service, etc.

Formula: (estimated hourly cost per business partner activity.)

Amount: \$2,400.00

Computation \$75 x 8 judges x 4 hours (senior exit interviews)

Explanation:

8. Value of other activities/business contributions not mentioned. Briefly describe activities/business contributions and any computations below.

Amount: \$10,000.00

Computation \$10,000 company match donation from Apple Computer

Explanation:

Total Match Required from Business Partners (calculated from student data): \$81,000

Total Match from Business Partners (calculated from 1 - 8 above): \$209,050

Section 9: Funding Summary

Number of Students Funded: 90.0

Maximum Grant Amount: \$81,000

District Match: \$127,629

Business Match: \$209,050