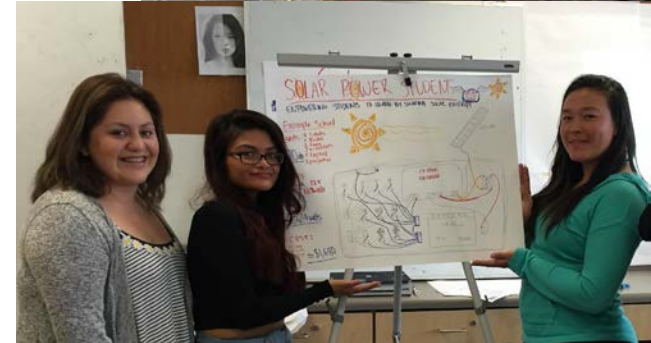
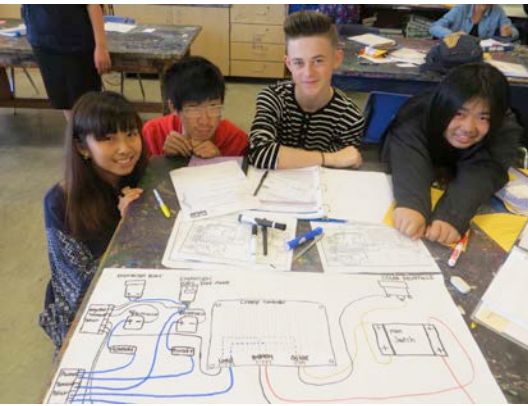


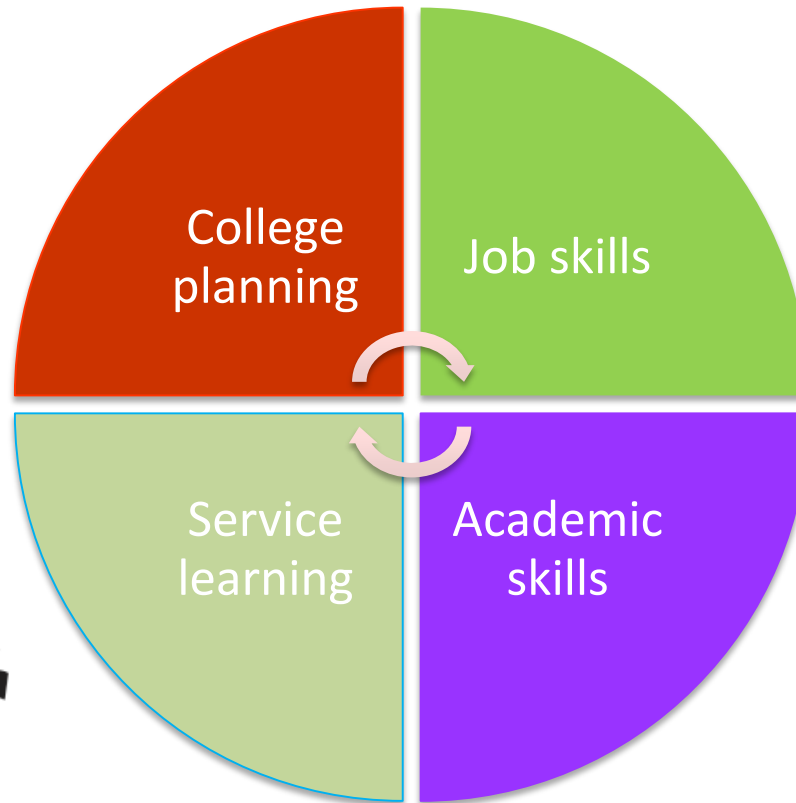
What if kids could save the world?



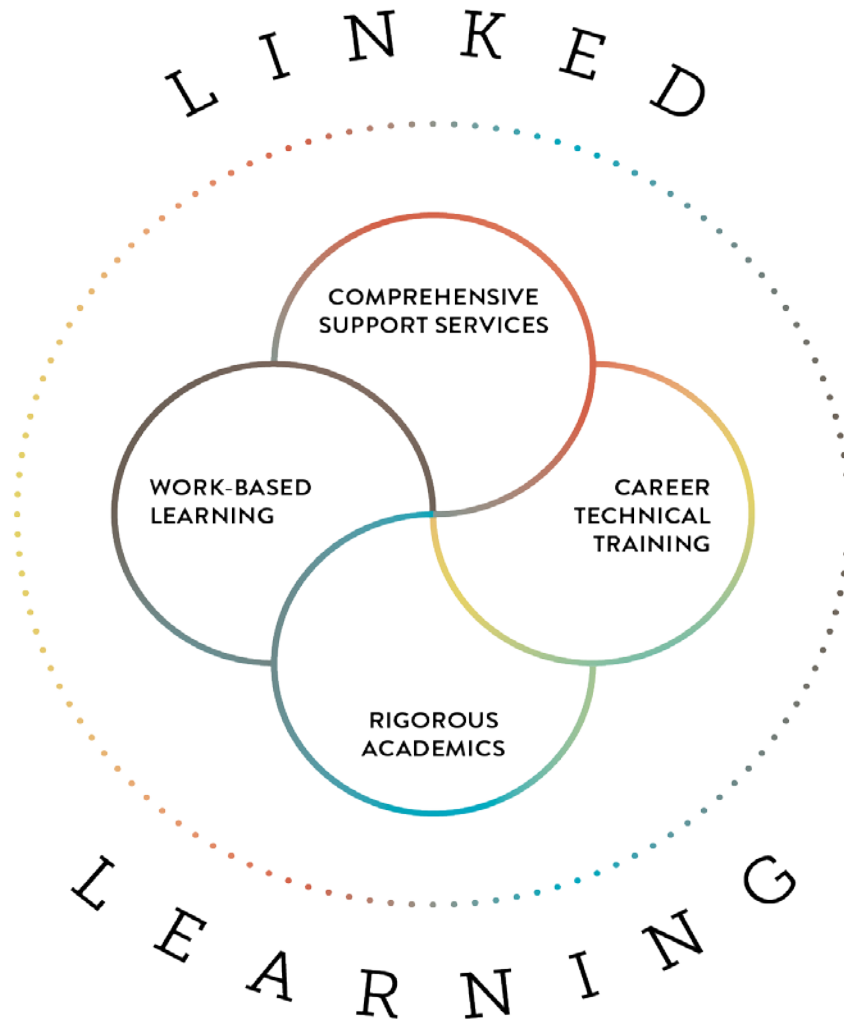
Educational Pathways into College and Career (EPICC)



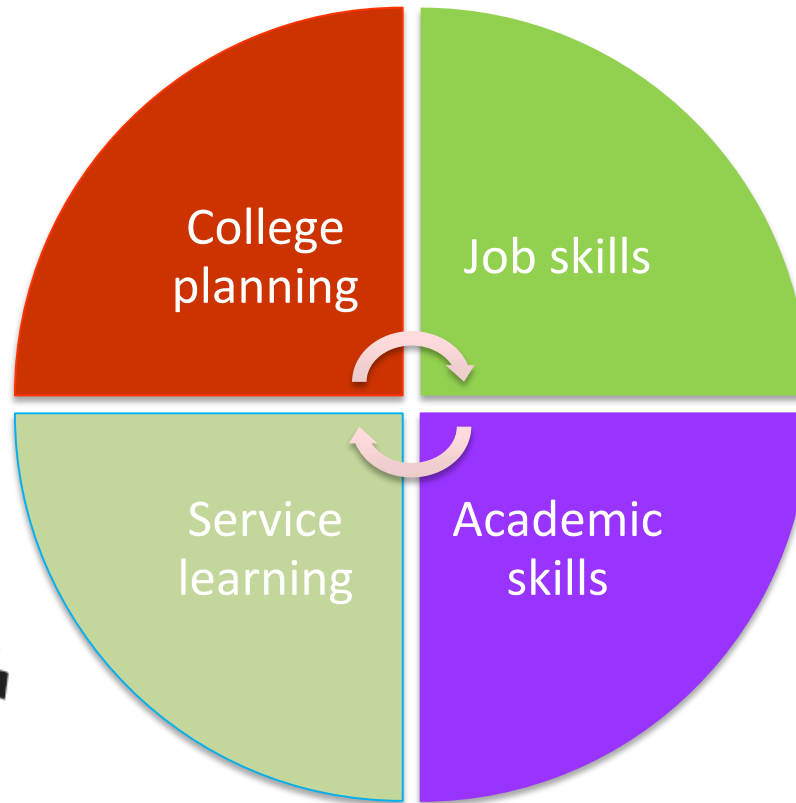
OUR PARTNERS



THE FOUR CORE COMPONENTS



OUR PARTNERS





United States



Senegal

South Sudan

The Philippines



Haiti



Sierra Leone



Cameroon

Kenya



Peru



DR Congo



Uganda



The problem and solution

Limited light



Solar power



Education in Madagascar

Neel & Co. presents:

WE MADAGASCARE



Solar Watts: 348 w

Battery: 1916 w

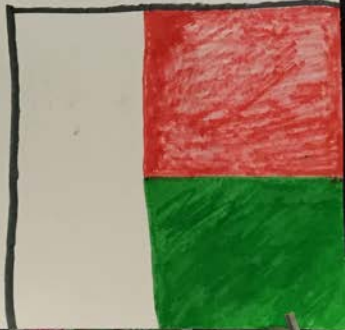
Amp-hrs: 160 Ahrs (battery)

Loads:

- ★ 3 E-Readers
- ★ 1 LAPTOP
- ★ 2 FANS
- ★ 15 LED LIGHTS

Cost: \$2075

FOR
EDUCATION IN
MADAGASCAR



Portable Medical Aid in Sudan

SOLAR SUDAN COST

LOADS	WATTS	POWER	TIME	ENERGY
LAPTOPS	5	30 w	8h	1,600
CELLPHONE	10	24 w	8h	1,920
FANS	2	100 w	2h	1,800
HEADLAMP	15	10 w	12h	1,560
LED LIGHT	19	5 w	12h	1,140
PHONE CHARGER	2	250 w	10h	1,100
TABLETS	2	20 w	2h	160
TV	5	150 w	7h	6,300

CHARGE CONTROLLER - 500\$

BATTERIES - 9,489\$

SOLAR PANEL - 9,489\$

TOTAL COST - 19,478\$

• NOT ENOUGH
MEDICAL ATTENTION



GOALS

- PROVIDE PEOPLE WITH HEALTHCARE
- TO MAKE PEOPLE IN BETTER HEALTH
- TO KNOW SOMEONE CARES FOR THEM

PORTABLE MEDICAL AID

Solar Suitcase Assembly & Commissioning



- Wiring



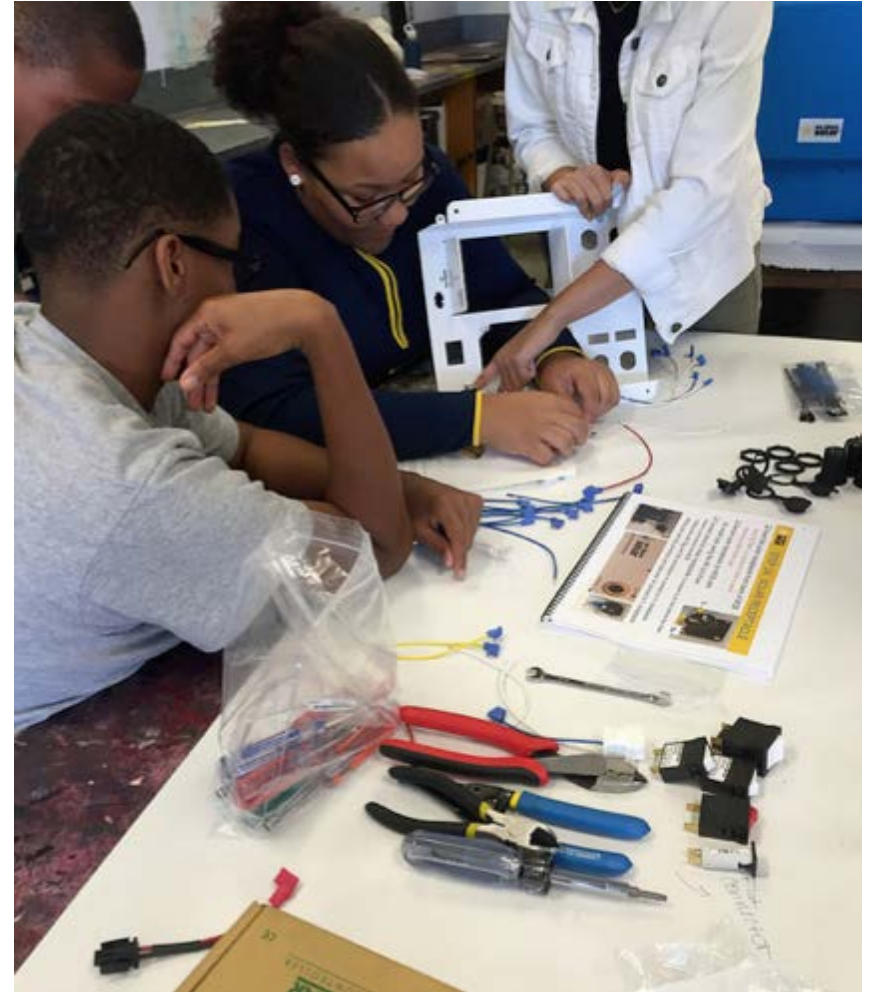
- Assembly & Tool Skills



- Commissioning



- Letters



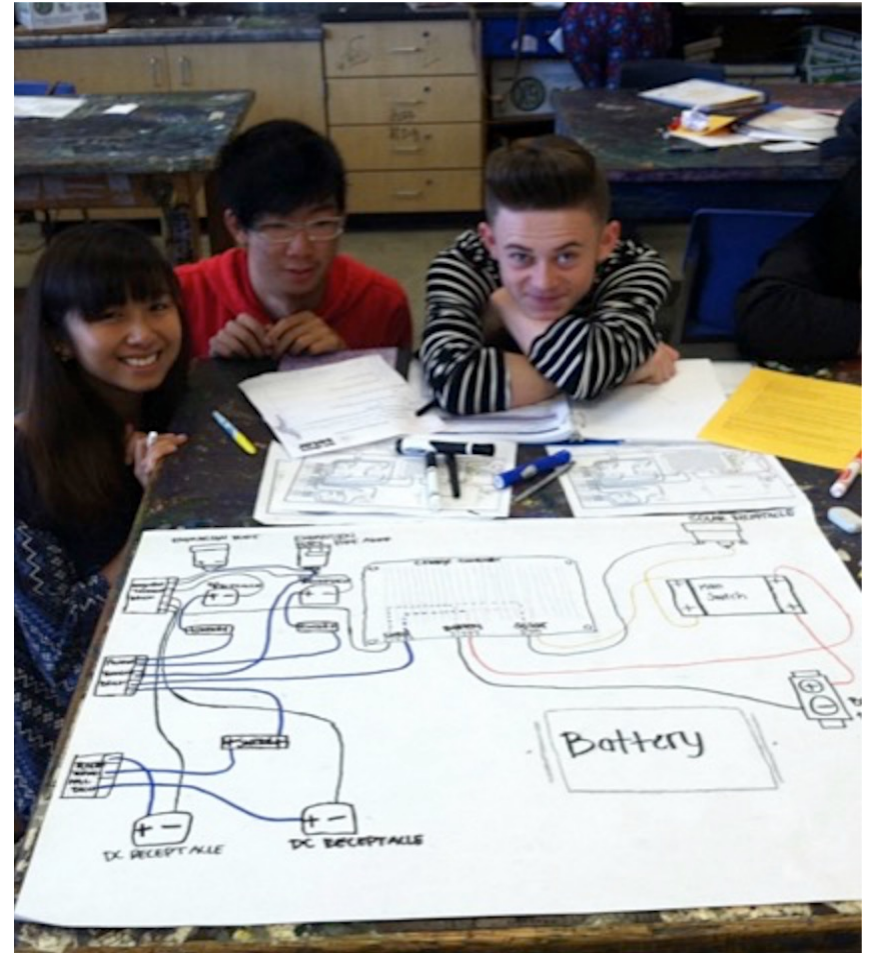
Solar Electric System Design

Stand-Alone System

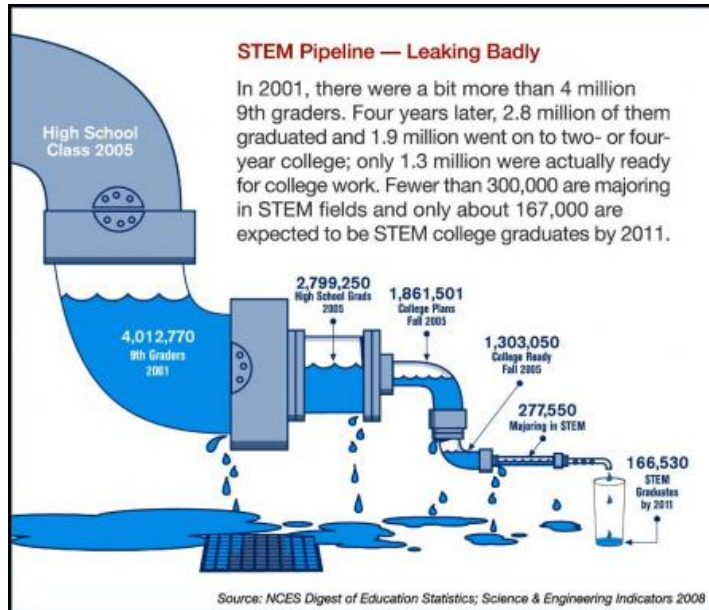
- Overview of the system

Wiring Diagram

- Simplify circuit:
solar charging
circuit, load
powering circuit
- Components



Math is a gatekeeper



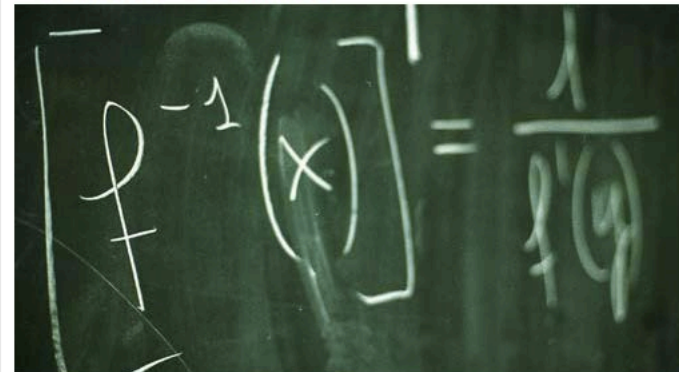
Math is a gatekeeper to higher education

More than a third of Cal State freshmen ill-prepared for college-level math, English

Adolfo Guzman-Lopez

February 19 2014

Community College Students Struggle to Pass College-Level Math



Story tools

Comments

Resize A A

Print

Share and Email

Inspire kids to *Aspire* in math



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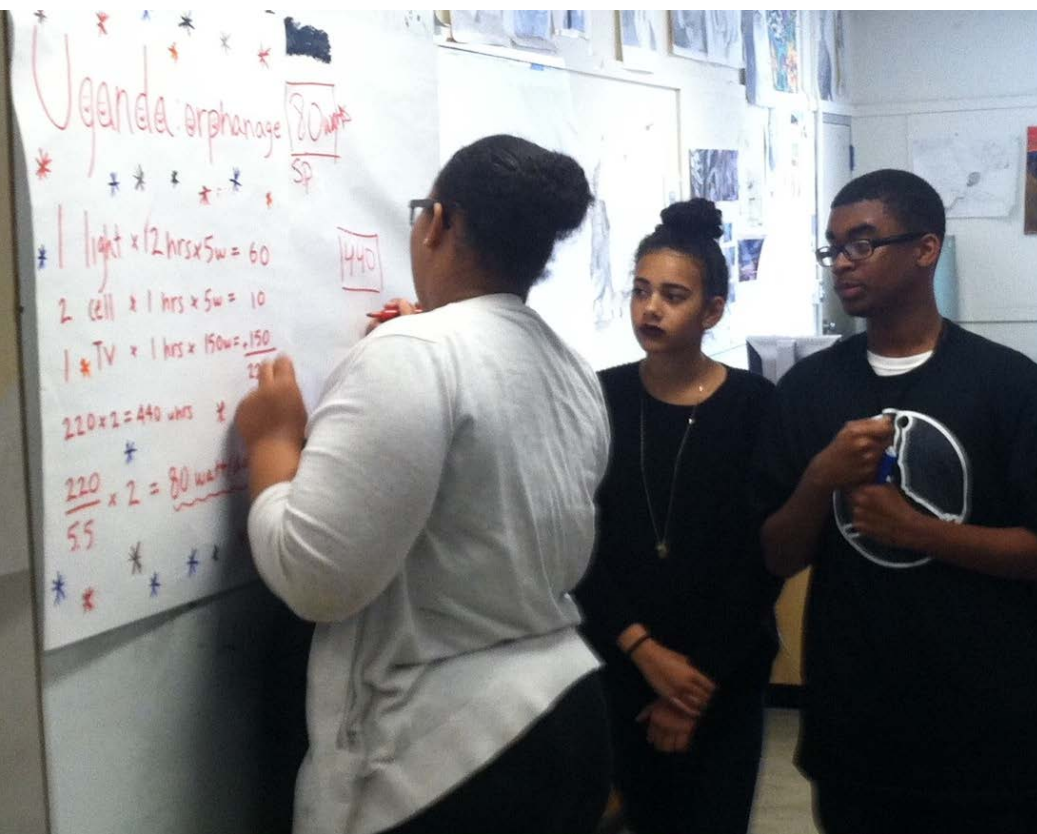
[Donate](#)

[GET STARTED](#)

The Aspire Story

For students, not for profit.





1) A transistor radio operated by a 9V battery that supplies it with a 50 mA current. If the cost to run the battery is \$0.90 per hour + it lasts for 300 hours, what is the cost per kilowatt hour (kWh) to operate the radio?

2) A heater draws 15 A from a 120 V source. It's operated 5 hours each day.

- How much power does the heater use in Kilowatts (kW)?
- How much energy in kWh does it use in 30 days?
- At \$0.08 per kWh, what does it cost to operate the heater in 30 days?

① Choose loads + Location

② Do Load Analysis

Load / # of Loads \times Power (w) \times Time = Energy

①				
②				+
③				+
④				+
...				

Total Energy =

③ Size Battery

Load $\times 2$

④ Size Solar
Load $\times 7$

⑤ Draw
Wire
Diagram

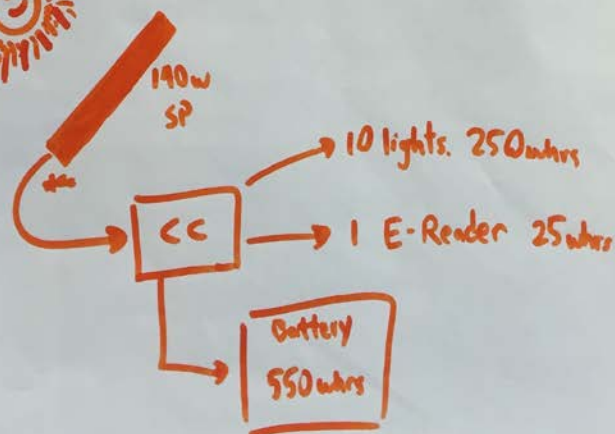
LIBRARY IN BURMA

Appliance	#	W	Hrs	WHRS
Lights	10	5	5	250
E-Reader	1	2.5	10	25
				<u>275 whrs</u>
				LOAD \uparrow

$$\frac{275}{2} = 137.5 \text{ whrs} = \text{Battery}$$

$$\frac{275 \text{ whrs}}{4 \text{ sun hours}} \times 2 = 137.5 \text{ W SOLAR panels}$$

$$\boxed{140 \text{ W}}$$



Support for and through college

**EAST BAY
COLLEGE
FUND**

BE AN OAKLAND PROMISE CHAMPION **DONATE NOW**


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[f](#) [t](#) [in](#)

OAKLAND PROMISE THE ISSUE PROGRAMS RESULTS GET INVOLVED ABOUT US EVENTS & DEADLINES

Where Are They Now?

East Bay College Fund has made a life-changing difference for many young people. Our alumni are well on their way to a future of personal and professional achievements. Many are giving back to our community and serving as role models to students just beginning their journey. Below are examples of where they are now.



RESULTS

- Outcomes
- Scholars
- Alumni
 - » [Where Are They Now?](#)

UPCOMING EVENTS

- Coliseum College Prep Academy Interviews
April 21, 2016
- 4 Year Orientation
May 10, 2016
- 2 Year Orientation
May 17, 2016

2-year
college

skills, transfer programs, summer
school

Attend Orientation

4 year requirements

• must graduate from h/s • SAT or ACT

• apply for admission and get accepted • Holistic review

A-G • No D's • Private college - flexible but rigorous

Holistic review

• GPA • Test scores • Activities

• Personal statement • Extra-curricular activities

Degrees from 4 year

• B.S. • B.A. • Study abroad

• Research Opportunities

• On Campus Living

College Prep: Extra or year of an A-G required class

Be specific
major

How to choose Colleges w/ Popular STEM major
- All/ Bachelor's

Opportunities

Team-work

Decisions

Respect

Collaboration

Safe-place

Trust

Step-Up

Culture

Difficult

Solar

Electricity

First-Time

College

Hands-on

University

Information

Step-Down

Summer-program

Community

Math

Challenge

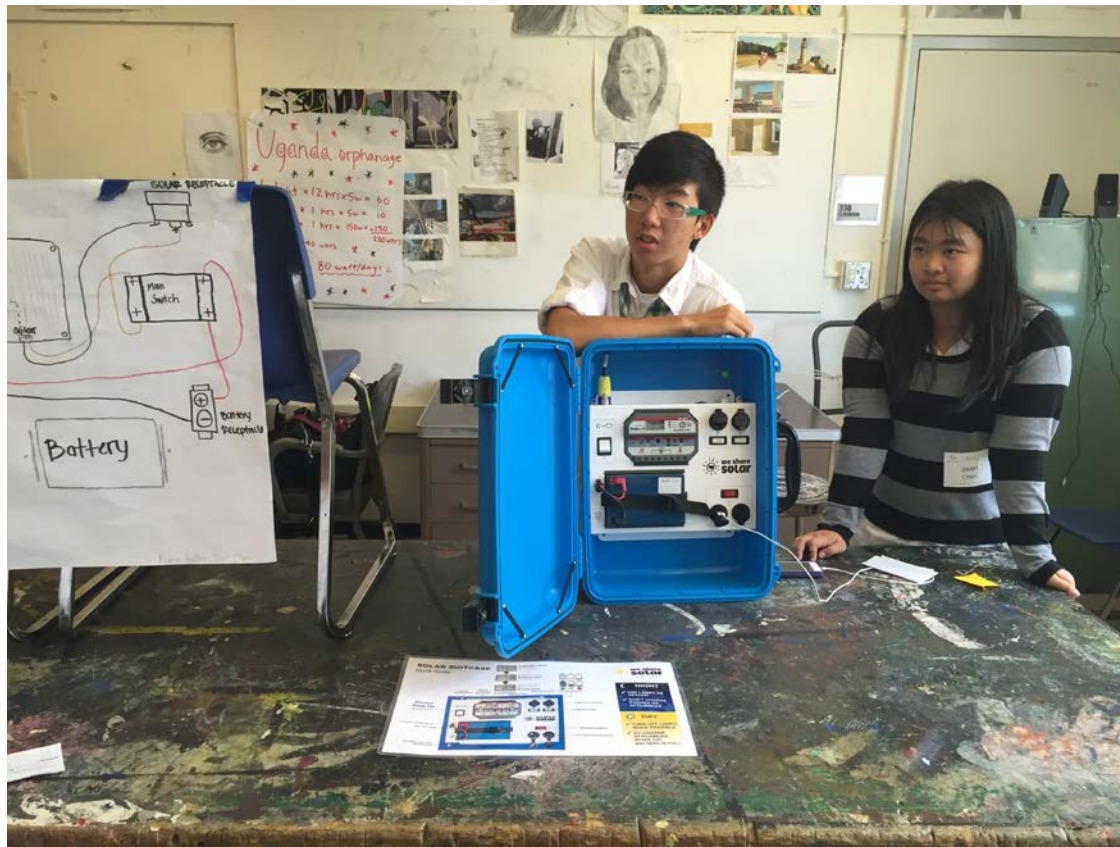
Take-for-Granted

DUAL ENROLLMENT

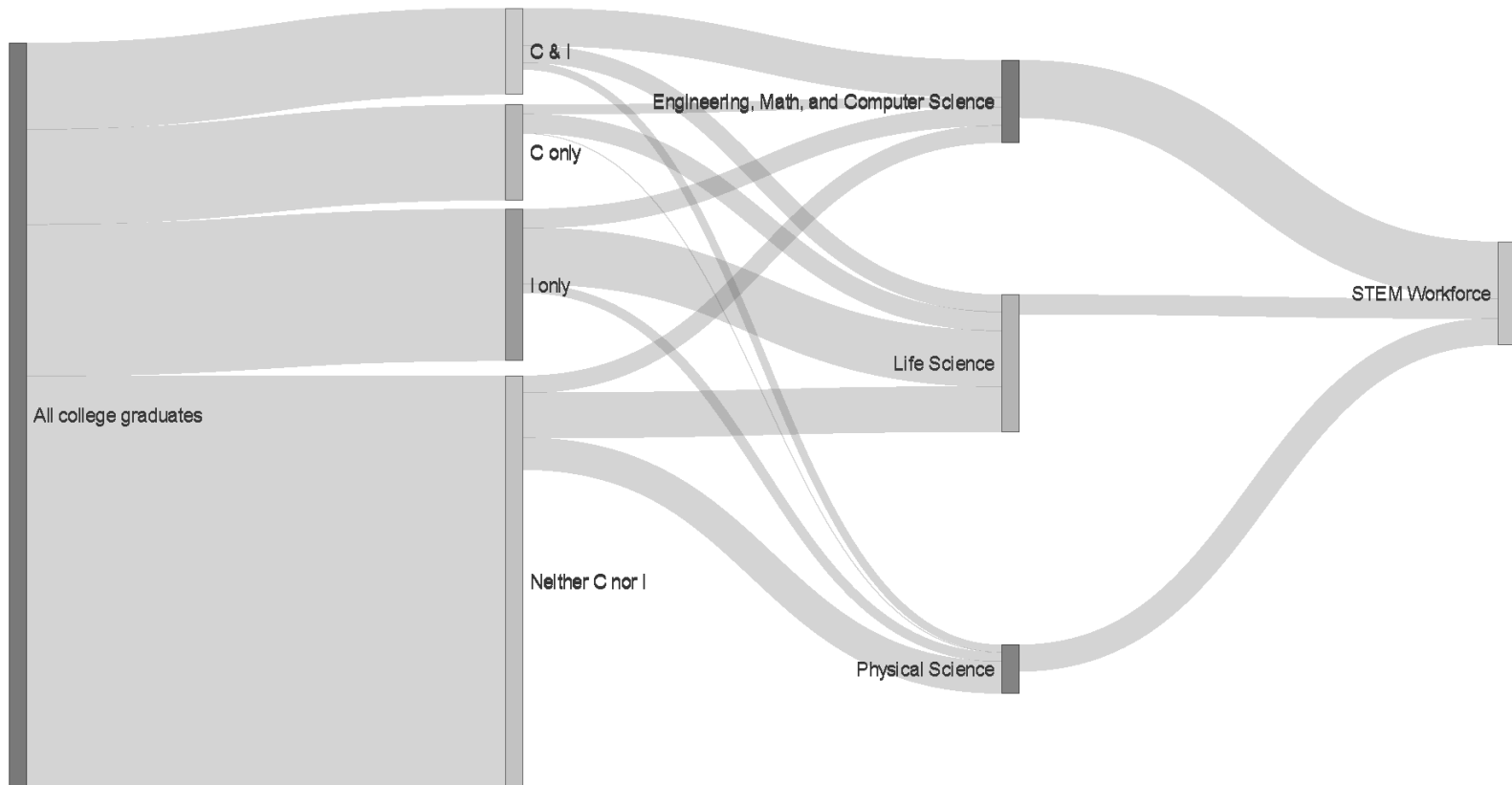
ACCESS COLLEGE-LEVEL RESOURCES


EXPAND CHOICE OF ELECTIVES

SAVE TIME AND MONEY



Multiple Pathways to STEM





Find us around!

We'd love to talk more...

- Ardice Hartry (PI) UC Berkeley
– hartry@berkeley.edu
- Joanna Totino (Co-PI) UC Berkeley
– jtotino@berkeley.edu
- Rosio Pedroso (Evaluator) Pedroso Consulting
– rosio@pedrosoconsulting.com