CLIMATE CORPS & SKYLINE COLLEGE
Sustainability Blitz 2.0 - College Sustainability Education and Project-Based Learning
INTRODUCTIONS

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CLIMATE CORPS FELLOWSHIP PROGRAM

- 10 months
- Full-Time Experience
- Substantial Role
- Monthly Trainings
- College Certificate
Energy Internships

Workforce Development
- 1 Dedicated Climate Corps Fellow per campus
- A minimum of 10 paid student interns

Energy Projects
- Conduct campus & community energy saving projects, identified by program staff, facilities, and other stakeholders

Community
- Connections with high schools: Interns provide energy instruction and inform students about college programs and careers

Energy Education

Curriculum
- New and/or expanded energy courses, certificates, and degrees in 1 or more energy career pathway

Professional Development
- Faculty instructional innovation workshops in energy curriculum and project-based learning

Resources
- Faculty grants for course enrichment.
- Curriculum and instructional resources shared on statewide program web portal

CONTACT/APPLY:
www.energizecolleges.org
connect@energizecolleges.org
3rd year of the Sustainability Blitz Program
38 Climate Corps Fellows Participated
20 Faculty, 8 colleges / universities
- Skyline College
- College of San Mateo
- Canada College
- Cabrillo College
- West Valley College
- College of Alameda
- San Francisco State University
~350 students reached
25 hrs prep time/Fellow
BLITZ EXPANSION TO NEW COLLEGES

**Davis Tran & David Liebman:** *Net Zero Energy - HVAC/CTE*  
Career Technical Education Class (Peralta CCD)

**Gwen Alledge:** *Agricultural Climate Justice – Botany*  
Class (College of San Mateo)

**Matthew Lee:** *Plastic Bottle Usage: Using Math as a Tool for Sustainability*  
-Math Class (West Valley College)

**Robert Jones:** *Sustainable Design – Engineering Class*  
(Cabrillo College)
RANGE OF CLASSES

- 3 English
- 2 History
- 2 Chemistry
- 2 Math
- 2 Early Childhood Education
- 1 Botany
- 1 Statistics
- 1 Communications
- 1 Biology
- 1 Wellness
- 1 Engineering
- 1 Philosophy
- 1 Environment Science
THE BLITZ PROCESS

1. Fellows organized into pairs & assigned faculty partner
2. Fellow/Faculty initial meeting & context setting
3. Create lesson plan
4. Deliver presentation
5. Finalize lesson plan with suggested readings & interactive exercises

Goal for Today

Learn techniques used to teach and engage children in sustainability issues through inclusive learning environments.
SUSTAINABILITY BLITZ EXAMPLES
SUSTAINABILITY, ENVIRONMENTAL JUSTICE, AND URBAN DESIGN

- Safe, clean water sources
- Access to cheap, healthy food
- Industrial pollution
- Transportation access and siting
- Public Transit Access
- Infrastructure
- Fair development (gentrification)
- Access to green/play spaces
50 minutes

Learning Outcomes:
- Energy sustainability
- Energy source pros & cons
- Changing sustainability markets
- Understanding microbiology-sustainability connection

WHERE DOES BIOTECHNOLOGY COME IN?

- Genetic Manipulation
  - Agricultural Products
    - Pest or disease resistance
    - Drought, flood, or salt tolerant
  - Gene Therapy
    - Cancer treatment
    - Autoimmune disease
  - Vaccines and Pharmaceuticals
    - MMR vaccine

Renewable Energy
http://www.amiznu.com/waterudoing/

- About
- Videos
- GIFs
- Infographics
SUSTAINABILITY BLITZ:
EVIDENCE BASED OUTCOMES
Q1: Rate your understanding of the term sustainability
(Scale 1 – 5; 5 - Excellent)
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Q2: To what degree do you feel like sustainability has a large impact in your life? How important is sustainability to you? (Scale 1 – 5; 5 – It’s a top priority)
Q1: Rate your understanding of the term sustainability (Scale 1 – 5; 5 - Excellent)

Q2: To what degree do you feel like sustainability has a large impact in your life? How important is sustainability to you? (Scale 1 – 5; 5 – It’s a top priority)

Q3: Do you see yourself pursuing a career or area of study related to sustainability, climate change or the environment? If you have already decided on a career, does that career incorporate sustainability? (Yes – 5, Maybe – 2.5, No – 0)
SURVEY RESULTS
Q1 RATING SCORES
Rate your understanding of the term sustainability (Scale 1 – 5; 5 - Excellent)

Pre
- Do not understand at all: 8
- Unsure: 36
- Heard about it, don't know what it means: 108
- Good grasp of the subject: 174
- Excellent: 21

Post
- Do not understand at all: 0
- Unsure: 1
- Heard about it, don't know what it means: 9
- Good grasp of the subject: 213
- Excellent: 125
Q1 OPEN ENDED RESULTS

Pre
- Resources
- Recycling
- Renewable
- Unsure
- Maintain
- Environment

Post
- Environment
- Recycle
- Reuse
- Energy
- Resources
- Climate Change
- Future

CLIMATE CORPS BAY AREA
Q2 RATING SCORES

To what degree do you feel like sustainability has a large impact in your life? How important is sustainability to you? (Scale 1 – 5; 5 – It’s a top priority)

Pre

<table>
<thead>
<tr>
<th>Not circled, but answered qualitative</th>
<th>Not at all</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Important</th>
<th>It’s a top priority</th>
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<tbody>
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<td>10</td>
<td>8</td>
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Post

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<td>1</td>
<td>3</td>
<td>34</td>
<td>201</td>
</tr>
</tbody>
</table>

CLIMATE CORPS BAY AREA
Q2 OPEN ENDED RESULTS

Pre

Food/Agriculture
Unsure
Health
Environment/Life
Resources
Conservation

Post

Environment
Health
Drinking Water
Clean Air
Life
Food
Water/Water Usage

CLIMATE CORPS BAY AREA
Q3 RATING SCORES

Do you see yourself pursuing a career or area of study related to sustainability, climate change or the environment? If you have already decided on a career, does that career incorporate sustainability? (Yes – 5, Maybe – 2.5, No – 0)

Pre
- No: 162
- Maybe: 140
- Yes: 50

Post
- No: 120
- Maybe: 148
- Yes: 77
## Fellow and Faculty Feedback

<table>
<thead>
<tr>
<th>Fellow</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liked “deep diving” with college age students</td>
<td>Liked program / would use lessons in future classes</td>
</tr>
<tr>
<td>Great public speaking practice</td>
<td>Added genuinely valuable insights to curriculum</td>
</tr>
<tr>
<td>Collaboration with faculty was biggest challenge</td>
<td>Excitement of students and eagerness to learn, approaching presenters after to get contact info</td>
</tr>
<tr>
<td>Finding common ground between syllabus and fellow topics was a challenge, but not major</td>
<td>Communication with Fellows &amp; time/scheduling constraints were biggest challenges</td>
</tr>
<tr>
<td>Fall instead of Spring</td>
<td>New teachers have difficulty foreseeing the timing challenge</td>
</tr>
<tr>
<td>Mandatory monthly check-ins with the professor</td>
<td>Would work with Fellows to map out lesson plan more</td>
</tr>
<tr>
<td>19 / 25 Fellows said great or excellent experience</td>
<td>Most said better than expected or excellent</td>
</tr>
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LESSONS LEARNED
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- Students:
- Access to untraditional disciplines
- High engagement
- Impacts within short timeframe
LESSONS LEARNED

- **Students:**
  - Access to unconventional disciplines
  - High engagement
  - Impacts within short timeframe

- **Fellows:**
  - Surprisingly positive experience
  - Teaching is tough/rewarding
  - Planning & logistics is everything
**LESSONS LEARNED**

- **Students:**
  - Access to untraditional disciplines
  - High engagement
  - Impacts within short timeframe

- **Fellows:**
  - Surprisingly positive experience
  - Teaching is tough/rewarding
  - Planning & logistics is everything

- **Faculty:**
  - Blitz tools have real value
  - Planning with guest lecturers presents challenge/opportunity
  - Student impacts manifest over time

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**CLIMATE CORPS BAY AREA**

[Logos: Skyline College, SEI Strategic Energy Innovations]
THANK YOU

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www.climatecorps-bayarea.org
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