HOLISTIC REVIEW OF SUSTAINABILITY WITHIN THE SCHOOL OF ARTS AND ARCHITECTURE

Sustainability Action Research: Arts and Architecture Team
TEAM
INTRODUCTION

CO-LEADS
- Sam Trezona
- Madeline Zhang

MEMBERS
- Gabrielle Biederman
- Grace Choe
- Samantha Low
- AJ Rosean

STAKEHOLDER
Linda Holmes - Director of IT & Operations
CONTEXT

- No previous project or teams
- UCLA Sustainability Plan

04-23: Leverage UCLA’s buying power to increase environmentally, economically, and socially responsible supply chains.

<table>
<thead>
<tr>
<th>% Green Spend per product category within 3 FY of addition to the Guidelines</th>
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<tbody>
<tr>
<td>25%</td>
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<table>
<thead>
<tr>
<th>% Economically and Socially Responsible Spend per product category within 5 FY of addition to the Guidelines</th>
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<tbody>
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<td>25%</td>
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Preliminary Research

Baseline Cultural Analysis
- Tours of facilities
- Informational interviews with staff + faculty

Findings
- Lack of information
- Trial & error learning process & accreditation limitations
RESEARCH QUESTIONS

QUESTION 1
What is the School of Arts and Architecture buying in all levels?

QUESTION 2
How is the School of Arts and Architecture disposing of materials and projects?
**STUDENT COMPONENT**

- **Student Survey**
  - *Anonymous Google form* w/ portable charger incentive
    - Out-of-pocket expense
    - Purchase & waste culture

- **Focus Groups**
  - 30 minute Zoom session
    - Life cycle of projects
    - Student reuse solutions
General Student Survey Breakdown

- 26 survey respondents
- Quarterly mean cost: $294.23

Cost
Priority Average: 1.73

Delivery Date / Material Quality
Priority Average: 2.5/2.46 respectively

Sustainability
Priority Average: 3.3
WHAT ARE STUDENTS SAYING?

- Reuse materials: 42%
  Easier reuse strategies needed

- Use paper: 88.5%
  Reduce print

- Dispose of projects: 92%
  Need standardized protocol
MATERIAL WASTE

Biweekly Average Waste Disposed of Per Person

ARCHITECTURE: 14.9 LBS

ART: 13.0 LBS

- Paper/Cardboard
- Wood Scrap
- Clay
- 3D Filament
- Plastic
- Foam Core
- Metal Scrap
- Oil Paint
FOCUS GROUPS: DESMA 22 - FORM

TOTAL EXPENSE: $190

- Laser cutting ($75)
- Paint ($50)
- Paint Primer ($10)
- Paint Brush ($30)
- Wood ($15)
If this "Surplus Stop" was implemented, how often would you frequent it?

- Once a week (38.5%)
- Once every other week (30.8%)
- Once a month (23.1%)
- Once every quarter (3.8%)
- Would not use the Surplus Stop (3.8%)
VENDOR ANALYSIS
BASICS

Rubric Quantifying Sustainability
● Digestible and reusable ratings of vendors

Vendor Types
● UCLA Official - invoices
● Student Source - surveys
● Alternative Source - A&A

<table>
<thead>
<tr>
<th>Departmental Vendor Sustainability Rubric</th>
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<tbody>
<tr>
<td>Holistic Analysis</td>
</tr>
<tr>
<td>Environmental Analysis</td>
</tr>
<tr>
<td>Ethicality Analysis</td>
</tr>
<tr>
<td>Economic Analysis</td>
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<tr>
<td>Procurement Sustainability</td>
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<tr>
<td>Results:</td>
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</tbody>
</table>

*a simplified example*
# The A&A Rubric: Research Methodology

## Sample Analysis Methodology

<table>
<thead>
<tr>
<th>Environmental Analysis</th>
<th>Score:</th>
<th>Laguna Clay</th>
<th>Clay requires the extraction of raw clay - but it is not an endangered resource.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does product deplete natural resources? (0-3)</td>
<td>2 - somewhat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does vendor prevent product waste? (0-3)</td>
<td>2 - mostly</td>
<td>Clay is a relatively biodegradable material and this clay can be reused for extended periods of time.</td>
<td></td>
</tr>
</tbody>
</table>

## Results:

| 4 | Laguna Clay is relatively sustainable |

### Research

- Culmination of each team’s efforts
- Information sourced via interviews, internet, etc.
- Examination based on research as to score
Vendor purchasing lists include single-use plastic violations

- Main Product Violations
  - Foam Core
  - 3D Filament
  - Art Supplies
GENERAL SCORING BREAKDOWN

Overall Scores of Current Vendors

Team Vendor Suggestions
Sustainable Tips!

Easy Ways to Improve Sustainability

First... What is Sustainability?
A sustainable practice/purchase is...
- Environmental: reducing your carbon footprint, non-toxic products, biodegradable or compostable, reusable
- Economical: similarly priced to non-sustainable options or would save money to compensate for its larger initial price
- Ethical: Fair pay for workers, safe working conditions, no animal cruelty

ALL 3 must be true for something to be sustainable

1) Increase Reuse Culture!

Project: Allocate more space + time to storage + distribution of reusable materials
Goal: To increase the amount of materials available for reuse by students, faculty, and staff
Reason: Divers waste from landfill, lowers total cost of materials on students

Some great examples currently happening:
- Wood Reuse in Fabrication Lab
- Ceramic Tool Redistribution in Ceramics Lab
- Problems: Not widely used by all students

Recommendations for Implementation:
- Increase student involvement: encourage students to give resources back to School and other students
- Increase contact between departments and other studies about extra resources

2) Increase Signage!

Project: Increase signage on how to dispose of commonly used items in studios and how to use certain machinery to reduce waste.
Goal: To decrease amount of excess waste cause by error or incorrect sorting of trash.
Reason: Diverts waste from landfill, lowers cost on students, prevents contamination of waste

QR Code for Example:

3) Pressure Vendors

Project: Increase Faculty and Student Pressure on Vendors to adopt more sustainable practices
Goal: Have all sections of Departments (students, faculty, and staff) request change directly from vendors.
Reason: Gives change at the industrial level, the most impactful changes occur there

ONLY 23% OF VENDORS HAVE BEEN ANALYZED FOR SUSTAINABILITY!

Recommendations for Implementation:
- Pressure Vendors to participate in EcoVads when purchasing (a company that rates vendors on sustainability)
- Pressure Vendors to be transparent about their impact in deals with them

DELIVERABLES
- Infographics of Results
- General Tips
- Student Survey
- Rubric
- Summary of Findings
- Distributed via Print + Email
SUMMARY OF TEAM’S IMPACT

A
Standardized Method of Evaluating Vendors

B
Broadened and Interconnected Conversation on Sustainability

C
Total Student Cost and How to Reduce
Looking Forward: Future Projects

A. Creating Reuse Culture
   Surplus stop implementation

B. Elimination of Single-Use Plastic Violations

C. Evaluation of E-waste
Thank you! Questions?

To our stakeholder: Linda Holmes
Our Advisors: Alberto Alquicira, Bonny Bentzin, Sofia Ratcovich, Liz Kennedy
All Supporting Staff + Faculty in Arts and Architecture: Valerie Green, Ed Beller, Soshi Watanabe, Eric Vrymoed, Philip Soderlind, Rayne Laborde, Else Henry, Rebeca Méndez

All students within the School who filled out our survey or gave advice!
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