

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.

% Green Spend per product category within 3 FY of addition to the Guidelines

25%

% Economically and Socially Responsible Spend per product category within 5 FY of addition to the Guidelines

25%

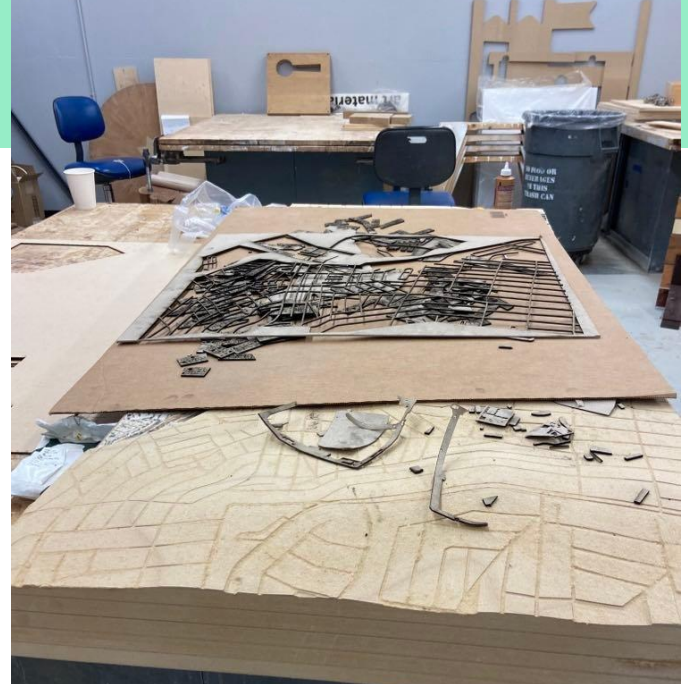
PRELIMINARY RESEARCH

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

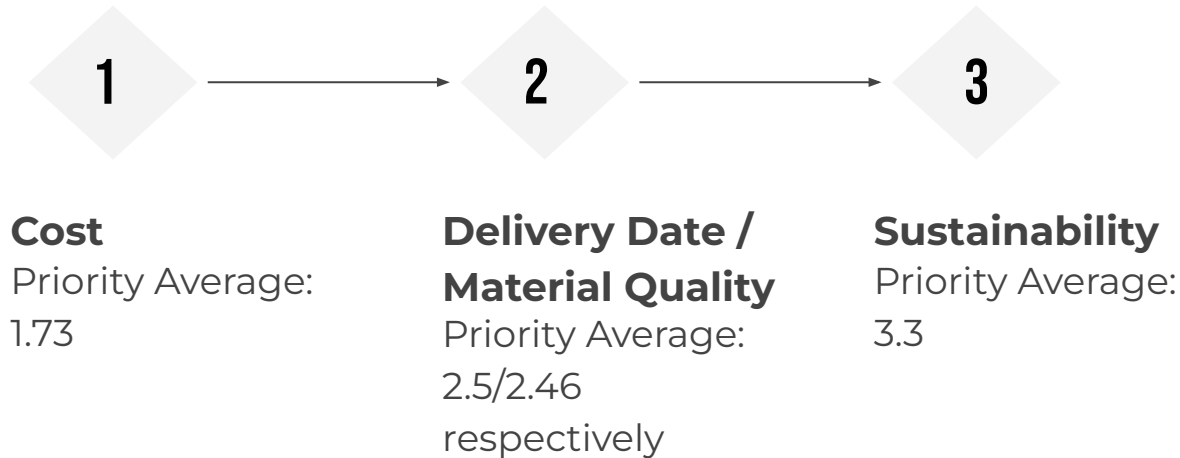
How is the School of Arts and Architecture disposing of materials and projects?

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

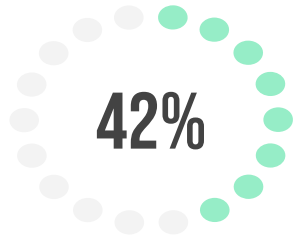


GENERAL STUDENT SURVEY BREAKDOWN



- 26 survey respondents
- Quarterly mean cost: **\$294.23**

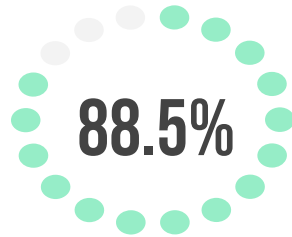
WHAT ARE STUDENTS SAYING?



42%

Reuse materials

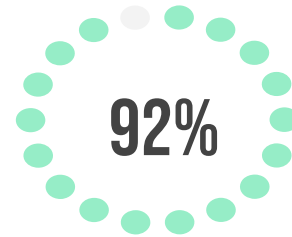
Easier reuse strategies needed



88.5%

Use paper

Reduce print



92%

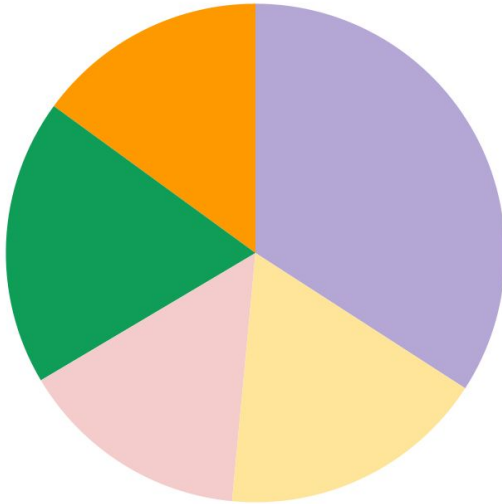
Dispose of projects

Need standardized protocol

MATERIAL WASTE









Biweekly Average Waste Disposed of Per Person

ARCHITECTURE: 14.9 LBS



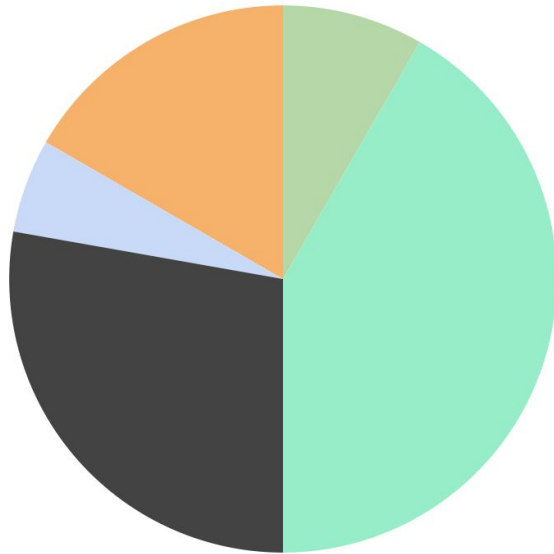
ART: 13.0 LBS



-  Paper/Cardboard
-  Wood Scrap
-  Clay
-  3D Filament
-  Plastic
-  Foam Core
-  Metal Scrap
-  Oil Paint

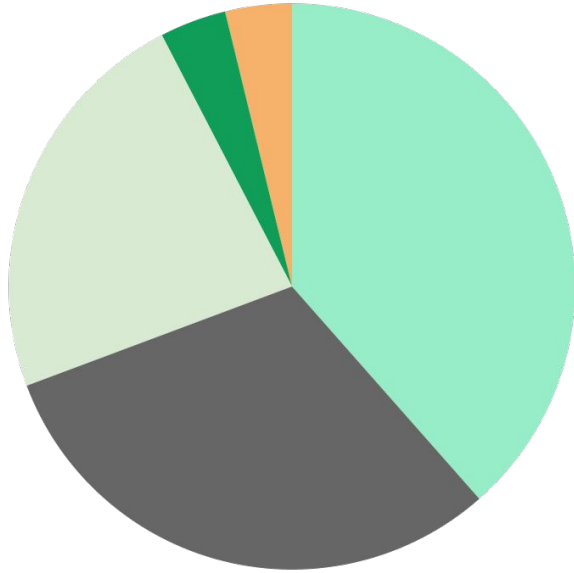
FOCUS GROUPS: DESMA 22 - FORM

TOTAL EXPENSE : \$190



- Laser cutting (\$75)
- Paint (\$50)
- Paint Primer (\$10)
- Paint Brush (\$30)
- Wood (\$15)

SURPLUS STOP SUPPORT



**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*

Departmental Vendor Sustainability Rubric		
Holistic Analysis	Score:	Vendor
Environmental Analysis	0-12	
Ethicality Analysis	0-12	
Economic Analysis	0-12	
Procurement Sustainability	0-4	
Results:	0-40	

a simplified example

THE A&A RUBRIC: RESEARCH METHODOLOGY

Sample Analysis Methodology		
Environmental Analysis	Score:	Laguna Clay
Does product deplete natural resources? (0-3)	2 - <i>somewhat</i>	Clay requires the extraction of raw clay - but it is not an endangered resource.
Does vendor prevent product waste? (0-3)	2 - <i>mostly</i>	Clay is a relatively biodegradable material and this clay can be reused for extended periods of time.
Results:	4	<i>Laguna Clay is relatively sustainable</i>

Research

- Culmination of each team's efforts
- Information sourced via interviews, internet, etc.
- Examination based on research as to score

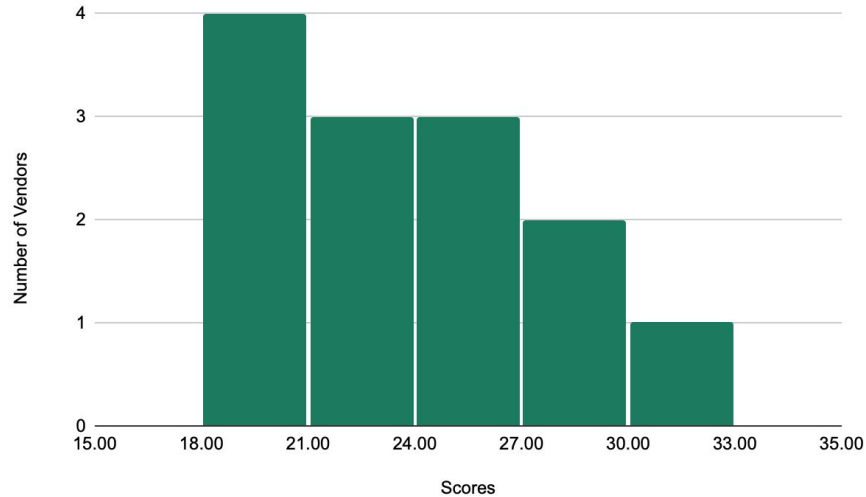
70%

Vendor purchasing lists include single-use plastic violations

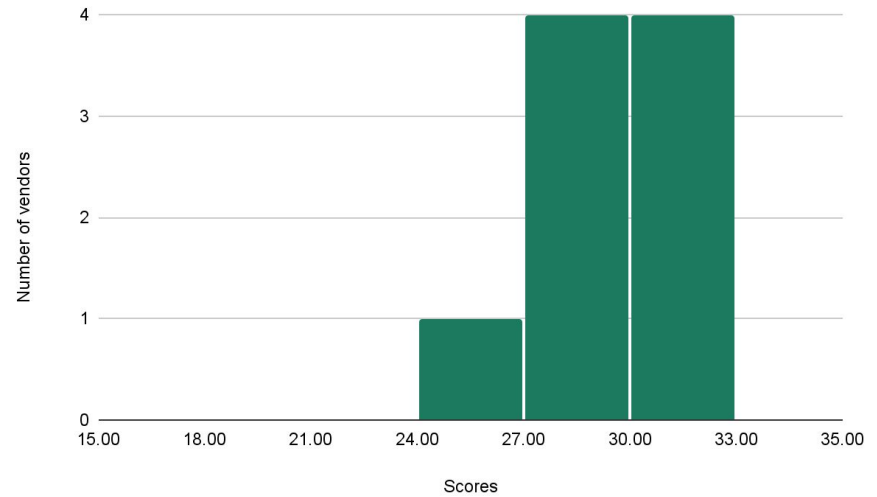
- Main Product Violations
 - Foam Core
 - 3D Filament
 - Art Supplies

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 Friendly → 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: Diverts 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 studios 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

Scan QR 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: Creates 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 EcoVadis when purchasing (a company that rates vendors on sustainability)
- Pressure Vendors to be transparent about their impact in deals with them

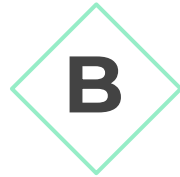
DELIVERABLES

- Infographics of Results
 - General Tips
 - Student Survey
 - Rubric
 - Summary of Findings
- Distributed via Print + Email

SUMMARY OF TEAM'S IMPACT



**Standardized
Method of
Evaluating
Vendors**



**Broadened and
Interconnected
Conversation on
Sustainability**



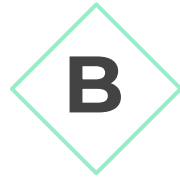
**Total Student Cost
and How to Reduce**

LOOKING FORWARD: FUTURE PROJECTS



Creating Reuse Culture

Surplus stop
implementation



Elimination of Single-Use Plastic Violations



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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