The Integration of Environment and Aesthetics at the Clark: Creating Student and Public Tours

By: Justin Betancourt, Joanie Cha, Mariana Garcia

Photo courtesy of: the Clark website
Overview

1. Background Information
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2. Overview of Projects
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   - 5 Stop Tour in-depth explanation

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   - Format

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Land Acknowledgement & Background
ENVI 402: Environmental Planning

Professor Sarah Gardner

- Environmental Planning Workshop
- Semester long environmental consulting and planning project
The Clark and its Environment

- 140 acres of forest, pasture, trails, buildings
- Almost half of visitors only use trails

CONTEMPORARY SHIFT:
- Recognize the value of campus as part of the visitor experience
- Accept stewardship of the land

How can the Clark incorporate the stewardship mentality into visitor experience and be a model for peer institutions?
Land Acknowledgement

The Clark Art Institute sits on the ancestral homelands of the Mohican people. We acknowledge the tremendous hardship of their forcible removal from these homelands by colonial settlers. A federally-recognized Nation, they now reside in Wisconsin and are known as the Stockbridge-Munsee Community. As we learn, speak, and gather here, we pay honor to their ancestors (past and present) and to future generations by committing to build a more inclusive and equitable space for all.

- The Clark Institute
02 Overview of Projects
Our Client and Representatives

General Client

Ronna Tulgan Ostheimer
Head of Education at the Clark

Professor Henry Art
Sustainability Projects Manager
Environmental Initiatives Tour: Two Deliverables

1. Main Focus: School Tour
   - Created for students in 6-8th grades
   - Main focus: the Water Feature and Schow Pond
   - Raise curiosity and awareness on the grey area between of “natural” and human-made water bodies, value of water

2. Public Tour
   - Self-guided; designed for all ages
   - Introduce visitors to the Clark’s environmental stewardship efforts
   - Built on existing trail system
   - Mainly digital
Methodology
Campus Tour and Interview with Professor Hank Art

- Gained a basic sense of the Clark’s commitment to sustainability and the campus history
- Schow Pond, low mow lawns, Reflecting Pool, Stone Hill, and town water tank
Campus Tour and Interview with Matt Noyes

- Horticulturist and Clark Grounds Manager
- Low mow lawns
- Semi-permeable parking lots
- Water treatment and storage
- Water feature
Assessment of Massachusetts DESE Standards

- Department of Elementary and Secondary Education has required Learning Standards: “clear and shared expectations for what all students should know and be able to do at the end of each year” (Massachusetts DESE, 2023).

7th Grade:

**ESS3. Earth and Human Activity**

7.MS-ESS3-4. Construct an argument supported by evidence that human activities and technologies can mitigate the impact of increases in human population and per capita consumption of natural resources on the environment.

**LS2. Ecosystems: Interactions, Energy, and Dynamics**

7.MS-LS2-1. Analyze and interpret data to provide evidence for the effects of periods of abundant and scarce resources on the growth of organisms and the size of populations in an ecosystem.
Assessment of Massachusetts DESE Standards

8th Grade:

**ESS3. Earth and Human Activity**

8.MS-ESS3-5. Examine and interpret data to describe the role that human activities have played in causing the rise in global temperatures over the past century.

CONCLUSION: Connect to human resource use and ecosystem cycling curriculum in 7th and 8th grade
Williamstown Elementary Teacher Interview and School Visit

- Interview Ms. Sarah Brill, Science Education Teacher at Williamstown Elementary School
  - Suggestion: comparison of human-constructed reflecting pool and seemingly natural pond
- Developed water filtration demonstration
- Kids loved it!
- 6th grade teacher, Ms. Kowalchyk, recommended physical (laminated) copies of diagrams to show students
School Tour
Environmental Stewardship School Tour: The Clark’s Waterscapes

The Clark’s Waterscapes
April to September
Clark Outdoor Campus and Clark Center

Campus Educational Tour (Grades 6-8)
Monday-Friday at 10:30 am to 3:30 pm (time frame)
Length: 60-90 minutes
Meet the school group at Admission’s desk [placeholder]

Goal: Teach middle school students about the Clark’s water features, the water cycle, as well as how sustainability requires deliberate decisions.

Tour Theme: How does the Clark manage its water supply, and maintain the balance between aesthetics and environmental stewardship?

Main Points of Theme:
- The Clark has a variety of ways that it maintains its water features and keeps them clean
- There is an array of ways the Clark manages water, maintaining the balance between aesthetic and conservation
- Different types of water bodies exist at the Clark, each containing their own essence (pond vs reflecting pool)

- ~90 minute tour given throughout May-June and September-October
- Created for:
  - Environmental Education for sustainable future
  - New demographic ⇒ STEAM, middle schoolers
- Emphasize how the Clark is responsible for caring for its land, with a focus on water
- Balance of aesthetics and sustainability
- **6 Stops** throughout the outdoor campus
Stop 1: Welcome and Introductions/Key Concepts of Tour

Location: Clark Center

Goals:
- Introduce key concepts of water responsibility and management
- Welcome and introduction

Questions:
- Benefits and responsibilities of being on this land?
- Engage with art v.s. outdoors
Stop 2: Land Acknowledgement

Location: Land Acknowledgement Sign at trailhead

Goals:
● Learning history to conserve land
● More equitable future
● Past work with Stockbridge-Munsee Historic Preservation office

Questions:
● Have you seen a land acknowledgment before?
● Why do you think this is important to talk about?
Stop 3: Schow Pond

Location: Schow Pond
Goals:
- Natural landscapes also shaped by human intervention
- Landscape supports local ecosystem

Questions:
- Is human interaction part of the natural world? ***No correct answer***
- Discuss pond in context of human management and natural water cycle
Stop 4: Water Feature

- Ask the students how the water is different from the pond and how it’s so clean
- Take a look at the pavers by the pool
- Briefly explain how the Clark filters the water; green roofs, pavers, sand, chemicals, etc
  - Introduce difference between natural and artificial filtering
- Mention the Williamstown water tank: gravity-fed public water is used for the pool

Image of water tank construction on Stone Hill: Taken 1992
Stop 5: Water Filtration Activity and Pavers

Location: Pavers close to reflecting pool

Goals:
- Step/dance on pavers to hear how they sound hollow: water can pass through!
- Apply scientific method (observation, hypothesis, experimentation, discussion) to real world samples
- Compare natural and human-managed filtration (groundwater infiltration in water cycle that feeds Pond v.s. Clark filtration system)
- Show helpful pictures/diagrams of both locations

Questions:
- How did the filters clean the water?
- Why/how is water filtered at the pond (through natural processes) v.s. the water features? How are they similar?
1. Create two makeshift water filters with clear plastic containers
2. Have sand, pebbles and other varying sizes of rocks
3. Add leaves instead of extra rocks to the water feature filter
4. Place cheesecloth over lid of plastic container and add water from each site
5. **Observe** water from two sources and water filters
6. **Form hypotheses**
7. Compare how the water looks afterwards and how long it takes to filter
8. **Discuss outcomes**
9. Show diagrams of water filter from feature
Stop 6: Conclusion of School Tour

- Ask students what they learned/key takeaways
- Re-state main themes of environmental stewardship and aesthetic integration
- Ask main questions:
  - What can be considered natural and “human-made”?
  - Can there be an overlap?
  - How can art and environmental stewardship be intertwined?
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Public Tour
## Self-Guided Environmental Stewardship Tour

<table>
<thead>
<tr>
<th>#1</th>
<th><strong>Low Mow Lawns</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>Only Mow 2-3 times a year</td>
</tr>
<tr>
<td>-</td>
<td>Conserve energy and allow grasses to grow</td>
</tr>
<tr>
<td>-</td>
<td>Add map of no-mow patches</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>#2</th>
<th><strong>Water Feature</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>Show map of Water feature filtering systems, roof drains and water storage</td>
</tr>
<tr>
<td>-</td>
<td>Point out the pavers around the feature</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>#3</th>
<th><strong>Parking Lot</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>2 of the parking lots have semi-permeable asphalt</td>
</tr>
<tr>
<td>-</td>
<td>Explain and show images of how it connects to water management</td>
</tr>
</tbody>
</table>

Will mostly be Presented on the Bloomberg Connects App!
Adding an Audio/Storytelling Component to the App

Learning through conversation and voice:

- As we learned about the sustainability features, we were guided by experts who spoke and guided us.

Example of Audio Explanation from a sustainability tour with Matt Noyes:

Monoculture for Aesthetics and No Mow Lawns -
06
Going Forward and Conclusions
Future Work

School Tour
- Keep an interactive element for the school tour
  - Provide a demonstration or hands-on activity
- While the pond is being dredged, the tour might be altered
  - Supports the comparison of natural and “human-made”
- Compare ideas to art pieces in the galleries

Self-guided Tour
- Interpretative signage for the Public Tour
  - Keep it minimal to not distract from surroundings
- Create QR codes to access the tour digitally

Future Work
- Self-guided Tour
Acknowledgements

We want to thank all of those who helped us throughout the semester!

Special thanks to Ronna Ostheimer, Professor Hank Art, Matt Noyes, Professor Gardner, Sarah Brill, and the rest of our class for your support and guidance!

Any Questions?