Report for Group Independent Student Project: Content Creation and Virtual Exhibitions

How the ISP Furthered the Goals of the Mellon II Grant

For January 2024, Content Creation and Virtual Exhibitions focused on "Visualizing the Ancient Cultural Landscape of Sarasota." The funded ISP/course furthered the goals of the Mellon II Grant by expanding the relationship between New College of Florida and Marie Selby Botanical Gardens from a MOU focused on botany to a more expansive connection based on historic preservation, public archaeology, and landscape studies and climate change. The course focused on new digital technologies for preserving local history, providing opportunities to create greater access to archaeological knowledge in the Sarasota community and significant for the community's identity. The community partnership demonstrates how multi-vocality can be achieved through new technologies in giving greater interpretative voice from members of the community, and the example of Marie Selby Botanical Gardens provides a model for partnerships with other community organizations.

The directed study during the ISP resulted digital content including 3D models, photographs, and landscape drawings of material culture, massive ancient architecture (shell mounds), shoreline being transformed by rising sea levels, and historic buildings across the 30 acres of the Historic Spanish Point campus of Marie Selby Botanical Gardens. Through the efforts of Director of Public Archaeology at Selby Gardens, Dr. Uzi Baram (a professor emeritus at New College of Florida), the students received an overview of the ancient history of Sarasota, concise understandings into the process of historic preservation and the logistics of museums, and access to materials and locations as well insights into the challenges and opportunities of archaeology for heritage for future employment. Visiting Professor of Anthropology Fred Pirone trained the students in the techniques and methodologies of digital technology for archaeology, supervised through efforts at the Historic Spanish Point campus, and situated their efforts toward success in the New College academic program. To conclude the course, students presented their digital content on January 22, 2024, at Chao Auditorium to staff from Marie Selby Gardens and the John and Mable Ringling Museum of Art, the New College Provost, and community members and New College students. The robust discussion following the student presentations illustrated the value of using the new technologies for documenting and representing ancient landscapes.

Learning Objectives:

The following learning objectives were successfully achieved, *Content Creation and Virtual Exhibitions*:

• engaged undergraduates in a process of active learning through community-based research using visual technologies.

- required undergraduates to employ problem solving skills, especially in effectively using visual technologies for photography, 3D Scanning, LiDAR, and photogrammetry to create meaningful narratives about challenging cultural landscapes and historic assets in Sarasota.
- facilitated participation in ongoing programs of public education, historic preservation, museum experience development in an organization focused on being a global leader in mitigation and adaptation to climate change.
- offered opportunities for technical and creative skills in using photography and visual technologies in research and public education that were accessed by museum professionals and community members as well as their academic instructor.
- allowed students to design and create effective narratives that capture the essence of the
 archaeological and the environmental significance of Historic Spanish Point that
 communicates the importance of the relationship and balance between humans and the
 environment.

Visualizing the Ancient Cultural Landscape of Sarasota illustrated the significance of public gardens as landscapes that promote community health and wellbeing.

Goals of the Course That Were Achieved

The course allowed students to create useful and substantive content using available technologies that are accessible to the public. This demonstrated how members in the community can help play a vital role in preserving heritage and archaeological assets that were threatened to be lost due to rising sea levels brought about by climate change. Additionally, the course demonstrated how members of the community can be actively engaged in the archaeological process of interpretation thereby opening the door for additional avenues of promoting multi-vocality in telling the story of the past and creating greater access to archaeological knowledge.

The course also laid the foundation for expanding community engagement between New College of Florida and Marie Selby Botanical Gardens, with the New College Public Archaeology Lab being a center for facilitating discussions, providing students a base for their collaborations, and storage of equipment. The course's accomplishments serve as a model for new relationships within the community to be formed with New College of Florida, including a new opportunity with the John and Mabel Ringing Museum of Art, similarly an expansion of previous relationships into archaeology, historic preservation, and anthropology.

The course has also led to two tutorials being offered in the spring semester 2024 at New College of Florida where students are working with materials important to the Sarasota community and 3D scanning and photogrammetry. The Public Archaeology tutorial is continuing the relationship with Marie Selby Botanical Gardens with students aiding in documenting material culture and

participating in a public archaeology event at Historic Spanish Point in March 2024. These accomplishments are leading to further course development. For example, this is establishing the foundation for developing courses in digital archaeology and field programs, and establishing a foundation for a new program of study and research based on digital and virtual exploration technologies that is being incorporated into the New College Public Archaeology Lab.

How the ISP Strengthen Community Outreach and Engagement

The funded course is increasing New College's capacity for community engagement through the relationship between the faculty and museum professionals, naming Dr. Baram and Professor Pirone, and providing equipment for students to experiment with content creation based on Sarasota history and heritage and virtual exhibits of their efforts.

The success of the ISP in strengthening community outreach and engagement was demonstrated by New College of Florida being invited back to Historic Spanish Point for further work along with being invited to participate in Archaeology Days (March 2nd and 3rd) where students from the ISP will be demonstrating to the public how to use the technologies learned about during the ISP so that members of the community can be part of the process of preserving important community heritage and cultural assets.

Additionally, the experience from the ISP facilitated Professor Pirone creating expanded relationships with the John and Mabel Ringling Museum of Art. Students of the New College Public Archaeology Lab will be engaged in digitally preserving the circus exhibition using 3D scanning techniques and LiDAR during Spring 2024 and beyond.

Participants

There was a total of thirteen (13) students who signed up and successfully completed the course, Content Creation and Virtual Exhibitions. In addition to these students, two additional students asked to audit the course. These two additional student students participated in the course in various capacities from attending work being conducted at Historic Spanish Point and with the final presentation.

In addition to the students, members from New College of Florida and Marie Selby Gardens Historic Spanish Point played key roles in the success of the course. These individuals were John McCarthy, Vice President for Regional History at Marie Selby Botanical Gardens; Dr. Uzi Baram, Director of Public Archaeology at Marie Selby Botanical Gardens Historic Spanish Point; and Dr. Frederick Pirone, Visiting Assistant Professor at New College of Florida.

Shortcomings

The major shortcoming of the ISP was the lack of access to more advanced versions of LiDAR and 3D scanning technologies. However, the content produced from the ISP provides an opportunity to show what can be done with entry level LiDAR and 3D scanning devices available for public

use and consumption. The content produced also provides justification for future grants and other funding sources needed to acquire professional, scientific grade LiDAR and 3D scanning technologies. This is because it has helped to establish a solid foundation in developing a new research program centered around digital archaeology and exploration.

What has been Learned from the ISP?

A major key takeaway from this pilot program was how to effectively link objects and places of heritage with interpretation using technology. With Professor Pirone providing the expertise in digital technologies and Dr. Baram having extensive experience at New College and across the Sarasota community, this funded course had a solid foundation and demonstrated the potential for community engagement at New College. The course propelled students, the professor, the museum professional, and members in the community to refine methods in how to employ the technology most effectively in the process of heritage preservation, conservation, interpretation, and public education.

A second takeaway from this ISP was learning what technology would be needed to build a viable research program at New College allowing students and the Public Archaeology Lab to me more effective in serving the community and engaging the public with archaeological knowledge in a more accessible ways that incorporate multiple voices from within the community.

How the Course May Be Offered Again in the Future

Visualizing the Ancient Cultural Landscape of Sarasota has laid the foundation for a new research program for *Content Creation and Virtual Exhibitions* incorporating digital technologies into the academic curriculum of New College. Continued work with Dr. Baram has already commenced with new projects 3D to include scanning important heritage material such as the Sarasota Stone Head Effigy and ancient tools interpreted through community-based archaeology. In addition to continued work in Sarasota, *Content Creation and Virtual Exhibitions* is leading to a robust research program across Florida and potential opportunities in the Mediterranean. Essentially, the ISP helped to establish the strengths, weaknesses and opportunities in establishing a research program based on digital exploration of material culture geared toward student involvement in the program of advanced undergraduate research and training in specific skill sets usefully for original research that can result in a thesis and career development in archaeology, museum studies, cultural recourse management, preservation and conservation of cultural heritage, and ethnography; the experiences and skills are useful beyond anthropology for such fields as computer science, business, the classics and humanities in general, the arts, and law to name additional areas.

The experience means iterations of *Content Creation and Virtual Exhibitions* can be offered as an ISP during the January term and as seminars during fall or spring semesters.