

1-1-2011

Laser Cutting Informatics

Charlotte Becket

Dyson College of Arts and Sciences, Pace University

Follow this and additional works at: <http://digitalcommons.pace.edu/cornerstone2>

 Part of the [Art Practice Commons](#), [Bilingual, Multilingual, and Multicultural Education Commons](#), and the [Other Education Commons](#)

Recommended Citation

Becket, Charlotte, "Laser Cutting Informatics" (2011). *Cornerstone 2 Reports : Community Outreach and Empowerment Through Service Learning and Volunteerism*. Paper 27.

<http://digitalcommons.pace.edu/cornerstone2/27>

This Report is brought to you for free and open access by the The Thinkfinity Center for Innovative Teaching, Technology and Research at DigitalCommons@Pace. It has been accepted for inclusion in Cornerstone 2 Reports : Community Outreach and Empowerment Through Service Learning and Volunteerism by an authorized administrator of DigitalCommons@Pace. For more information, please contact rracelis@pace.edu.

Final Report

Thinkfinity Informatics

Cornerstone #2: Community Outreach and Empowerment

Professor Charlotte Becket, Dyson College: Art Department

Fall 2011

A. Please outline your original goals.

The original goal for this grant was to expand and develop the equipment and community programming that was originated with a previous Thinkfinity Grant in 2009. These updates included, for the studios; updating the dedicated computers, incorporating a Mac Parrallel platform to link the sculpture studio PC to the Mac Digital lab, expanding the software for the laser cutter and adding an electromagnetic sensitive table saw to handle materials. The community and pedagogical aspects of the program were to; expand to include two Summer Portfolio Development Workshops for high school students that included laser cutter workshops, host two student art exhibitions in the Fingesten Gallery on campus with the resulting work and create an internship position for a Pace student to mentor the high school students.

B. What progress have you made towards your original goals on your project to date?

The computer and software has been updated and we ran two successful Summer Portfolio workshops in collaboration with the Joan Mitchell Foundation, a not for profit arts organization that provides grants and educational opportunities to professional artists as well as underserved k-12 students. Wanda Ward, a Pace University student, received an internship with the Joan Mitchell Foundation and worked both closely with the students as a teaching assistant as well as in an administrative capacity with Jose Ortiz, the Director of Student Services, at the JMF. The Summer Portfolio Development Workshops both culminated in an exhibition at the Fingesten Gallery, students' families and friends were invited for the opening receptions to see the artwork and to ask questions about Pace.

Additionally, the equipment has continued to be incorporated into a broad range of Art Department courses including; Sculpture 1, Project Studio, Principles of Design, 3D Desgin and a number of Independent Study projects.

C. What activities have been completed to contribute to meeting/progressing toward these goals?

To complete the goals, in collaboration with the education directors of the JMF and administration at Pace, I organized two groups of students (17 students each) to be hosted at the Pace University Art Studios. Held technology demonstrations and an exhibition at the end of each workshop to show the resulting work in the Fingesten Gallery. We also work together to create an internship for a Pace Student at the JMF. Additionally, I updated the technology and software and was a guest in the Project Studio and 3D Design classes at Pace to teach the students and faculty how to use the software.

D. What activities have not been completed? Please indicate why they have not been completed.

To date the portion of the grant that has not been completed is the implementation of the electromagnetic table saw. We are scheduled to receive more studio space from the university in the Fall 2012 semester that will allow us to set up this equipment.

E. Please outline the outcomes you have received as a result.

- Updated the computers and software for the laser cutter and created programming for classes in the Art Department including for Project Studio, Sculpture 1, Principles of Design, 3D Design, and Independent Studies. For these classes I have attended class as a guest to teach students how to use the laser cutter as a tool for making artwork.
- Trained a number of students how to use the technology including the department's work study student, Tarik Meertins, who holds open studio hours for students interested in using the equipment.
- Held two Portfolio Development workshops and exhibitions with local high school students through the Joan Mitchell Foundation.
- Created an internship at the Joan Mitchell Foundation for a Pace University student.
- Created a partnership with the JMF and St. Nick's Alliance in Williamsburg Brooklyn.

F. Did you create a Class? If so, is the class running?

While I did not create a class exclusively for the laser cutter, the laser cutter has been incorporated into various Art Department courses including; Project Studio, Sculpture 1, Principles of Design, 3D Design, and Independent Studies. For these classes I attend classes as a guest to teach

students how to use the laser cutter as a tool for making artwork. In addition, I have trained the department's work study student, Tarik Meertins, to use the technology and he now who holds open studio hours for students interested in using the equipment.

G. Has your project impacted students? If so, how many?

Since 2009 we have hosted over 80 local high school students over the last 3 summers and have shared the technology with a majority of students and faculty in the Art Department. Both students and faculty have used the technology to make their artwork.

H. Has your project impacted other faculty members? If so, how many?

Professors Roger Sayre, Jillian McDonald, Linda Herritt, Jane Dickson, Barbara Friedman, Jonathan Brand, and I have all incorporated the new technology into their courses at various times, particularly in *Project Studio*, the department's capstone course. Additionally, these faculty members have also used this equipment for their own research. It has been inspiring and motivating for our students to see faculty working in the Pace Art studios on their own work.

I. Were there any unintended outcomes achieved?

As a result of the partnerships with the Joan Mitchell Foundation and the St. Nick's Alliance, I was invited to join Board of Advisors for Community Programming at the St. Nick's Alliance. We have also been invited to numerous college portfolio review days organized by the Joan Mitchell Foundation. And have been collaborating with Amplify Action at Pratt Institute, an organization for education, art and sustainability in the New York community.

J. Did you present at a conference?

I have not presented at a conference but my own research work, made on the laser cutter, was included in both a solo and a group exhibition at Crisp Gallery, London in 2009 and 2010.

K. Do your outcomes reflect the change or benefit you were hoping to receive?

This grant has been a wonderful way of expanding the artwork both my students and I have been able to make. It has acted as a vehicle for community building and has helped my students learn by teaching others. The laser cutter is a marvelous machine it quickly and smoothly cuts out material with a beam of light, just watching it is fun. It pulls student in, makes them ask questions and generates discussion, visiting high school students stay and become interested in the department and the university. We have a very small studio, which is a reality

for New York City artists. The laser cutter only takes up 6 square feet of space and can produce huge sculptures by cutting out modules that can be transported and put together on site. We are truly grateful for this opportunity from Pace.

L. How has your project furthered the Thinkfinity Cornerstone you selected?

I selected the Community Outreach and Empowerment cornerstone for this project. We have created a number of community partners including The JMF, St. Nick's Alliance, and Amplify Action. Through these collaborations we are bringing together students of all ages to learn about technology and art at the Pace University NYC campus. Both faculty and students have been brought together to make artwork using this technology and it has provided a way to expand and our current course curriculum.

M. Describe your future plans for sustaining the program or project.

I hope to continue developing ways of incorporating this technology into our classes and developing our facilities to include the table saw, which is still waiting to be used. I am meeting with faculty this semester in my own department to develop more course material, including engraving plates for Print Making with Prof. Fudge and 3D modeling design for a new 3D Design course to be taught by Prof. Brand in the Fall. I have reached out to Dr. Knapp from Seidenberg to invite anyone interested on their faculty to create an interdisciplinary course integrating art and technology. Dr. Knapp has contacted her faculty on my behalf and I am waiting to hear back. I also hope to continue working with students in the community through our various partnerships. We are invited to join the JMF for a high school portfolio review day this February.