

Pathways to Peace: IAP 2002

From Heart to Art to Part
An Experimental 6 unit course run during IAP 2002



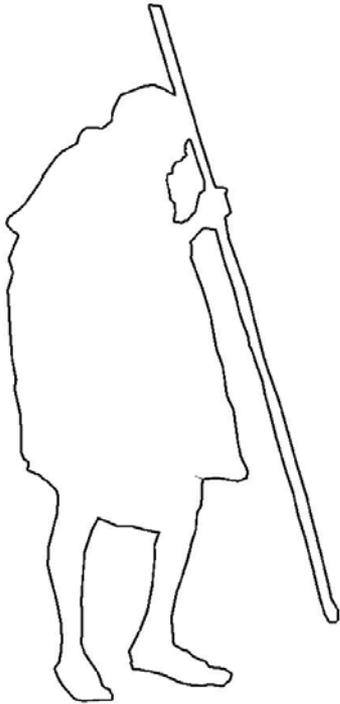
The Goal:

To provide students with an artistic means of expressing their thoughts on peace and allow them to create lasting symbols thereof.

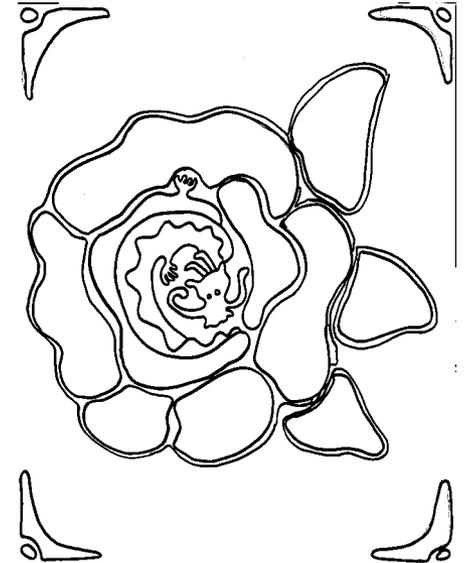
Choosing a Concept

An Engineering Approach

Students generated 5 concepts for their tiles.



Using the Rohrbach technique, students evaluated other students' concepts.



Based on the constructive criticism, students picked their final concept.

Learning from the Experts

Artist and Architect Experience

Linda Miller

One of the few waterjet artists in existence, Linda spent one week with the students. Linda's input was pivotal in guiding the students.



Wasma Charbouchi

A faculty member of Harvard's Islamic Architecture department, Wasma taught the beauty of cultural art and art making.

Converting Art to Engineering

Moving from the Ideal to the Practical

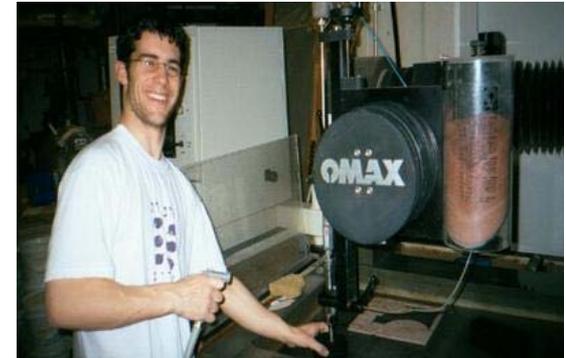
The most challenging part of this exercise was converting the concepts embedded in the drawings to usable engineering files.



A combination of programs were used to vectorize the drawings and create files compatible with the waterjet.

Creating the Parts

Waterjetting



Using a high-pressure stream of water with entrained abrasive, the students created all tile parts on a waterjet machine.



Laying out the tiles

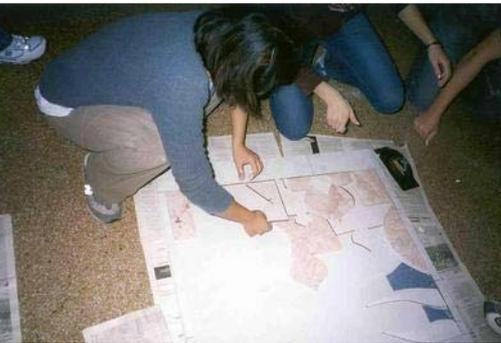


Building the Tiles

Mortar and Grout



The students all worked together to build the tiles into their final design



Finished Tiles!



Did the Students Enjoy & Learn?

See the website www.pathstopeace.org for the presentations each student did to explain their tiles

"I took the opportunity of taking the Pathways to Peace class as a chance to create something permanent, which reflects my culture and background. [W]e should be able to live together and tolerate each other. Our 'differences' make life just that bit more interesting." -Nur Aida AbdulRahman, Cambridge-MIT Exchange Student

"When I read about Pathways to Peace in the course catalog, I thought it sounded like a really exciting idea. I registered right away for it, but I thought that there wasn't a possibility of actually participating in the class because it was limited to 6-12 students, and I'm only a freshman. Participating in this class has been an eye-opening experience. It made me question how I identify myself, and what parts of my background I consider more important."-Monica Rush, MIT freshman

"I feel that it has helped me learn more about other students in a way that would never have been possible without this experience. Pathways to Peace allowed each of us to express our cultures and personalities through both tangible and intangible means." -Ming-Fai Fong, MIT freshman

"The Pathways to Peace project has allowed me to represent my background as a Chinese-American in a way that is not only beautiful, but also useful."-Frances Wong MIT junior, course 3

Resources Required

- First year costs:
 - Staff:
 - Engineering faculty: (1 summer month)
 - Arts faculty
 - 1 Teaching Assistant (net cost \$50k)
 - Summer 2002 to help develop course materials
 - Fall 2002 to help run the course
 - Spring 2003 to help students install their tiles; to help evolve the course and have it ready for Fall 2003; and to write an article to submit for publication in an education journal
 - Hobby Shop (\$10k for materials, instructor time, and student membership)
 - Abrasive Waterjet Machining Center to be installed in the Hobby Shop (\$50k)
- Subsequent years:
 - 1 TA (Fall) and \$10k for Hobby Shop time and materials