molds are created, used to cast other pieces and then disposed. They typically consist of multiple sheets of MDF glued together.

sheets

shapes are cut out by the one roll or the laser cutter. After the shapes are cut out, what’s left of the sheet is typically disposed.

smaller, more manageable pieces can be extracted from these molds and then used to create other objects.

The exhibition would take place early in the Fall 2010 semester in the Recap Room, Stander Hall. The objects in the exhibition will be derived from excess materials and waste produced in the Digital Fabrication studies.

By displaying these objects in one space, students will be cognizant of the fact that digital fabrication, given all of its limitless possibilities in design, could yield massive amounts of waste.

Raising awareness is only one aspect of this exhibition. It will also serve to bring new ideas in reducing and reusing waste as well as fostering collaboration between students of the SanFixx schools. Students from all departments will be invited to participate in these constructs and will be given the opportunity to exhibit their work.


digitalwaste

a student exhibition to showcase what we destroy when we create

BACKGROUND

Digital fabrication is becoming more and more prevalent in all fields of design. Almost any design can be manufactured through digital fabrication - the only limits being the size and capabilities of the machines used to cut, carve or create the design. While designers work through their computers, the design work tends to focus solely on visual aesthetics and how a machine could be used to facilitate its creation. Unfortunately, little thought is put into the raw materials initially used by the machines, and as a result, a lot of waste is produced.

Last year, the first full-scale digital fabrication studio introduced SanFixx students to the possibilities of design, construction and assembly of digital objects at a full scale. Molds were created by using a CNC mill to carve large solid blocks of MDF. These molds would later be used to shape pieces of acrylic also out by the CNC mill. After weeks of learning the software, operating the machine and understanding the assembly, the studio resulted in an organic, tessellated and colorful checkerboard that enlivens the central stairwell in Greens Hall.

Today, we can visit an exhibition depicting the process and the result of this studio’s creation. Currently the final pieces hang from the ceiling in the central stairwell in Greens Hall, third floor. Although visitors can see the design process and understand the logic of their work, the exhibition does not showcase the large amount of excess materials produced. Essentially, all molds (approx. twenty 4x4x4 MDF sheets) and all acrylic cut-outs (approx. seventy-five 4x4 sheets) were disposed of at the end of the initial project.

As the SanFixx school pursues more digital fabrication studies, we need to be aware of the waste that could be produced by them. Raising awareness of this digital waste, future digital fabrication studios will consider not only their designs and the capacity of the machine, but will also be sensitive of the materials they use.

PROPOSAL

For this year’s 2009 Laskey Award, I would like to propose gathering the scraps of the digital fabrication studios and using my summer to give these materials a second life. The digital waste would then become raw materials for new creations: light fixtures, furniture, sculptures, etc. These objects will then be displayed in an exhibition in the Fall so that students of the SanFixx school can quantify the amount of waste being produced in these studies.

In an effort to collaborate between schools within the SanFixx School, I would also like to propose gathering students from architecture, exhibition design and sculpture to aid in the creative process of assembly and exhibition. Through collaboration, we would achieve more critical and original constructs while tapping into the multiple creative minds that we are fortunate to have in the SanFixx community.

The final life of these objects would be to the discretion of their authors. Depending on their function, some pieces could be donated to the School, while others might simply be kept or sold by the author.

My goal is creating this exhibition is to simply make students conscious of the fact that although we now have new, technologically-based facilities, we should not overlook issues in materially and access. As a result, future digital fabrication studios will have to push the limits of their designs, not only in what the computer can generate or what a machine can create but also in our capacity to design efficiently.