

GUATEMALAN ARTISAN DEVELOPMENT THROUGH INDUSTRIAL DESIGN

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For generations, the artisans of Guatemala have produced high quality floor tiles and roofing tiles by employing the most basic materials and manufacturing processes. The typical process involves digging three types of soil from the local terrain, adding buckets of water and trampling the mixture with their feet. They then press the mixture into molds and smooth the surface with a machete. The tiles are left to dry in the sun. After the tiles are stacked in brick enclosures with cords of wood, the wood is set ablaze and left to cool for a week. The results are top quality masonry units that are used in local construction and exported around the world. The work of these artisans is considered by government economists to be an untapped source of economic potential in the less developed areas of the country.

This is just one example of the traditional artisans' skills still practiced as some of the national treasures of Guatemala. Other equally fascinating artisan skills include the crafting of furniture, metalwork, pottery, jewelry, and weaving. In cooperation with the Guatemalan government, the Industrial Design students and faculty of the Universidad Rafael Landivar are currently collaborating with local artisans to help them expand their "product line" for broader sales and marketing in the United States.

This narrative relates how the Landivar design program orchestrated their design student/artisan collaboration and how this educational coalition is now being expanded to partner with Industrial Design students from North Carolina State University via Internet.

Ovidio Morales, professor, designer and co-author of this work explains how the student/artisan collaborative, named Proyecto Cuatro, or Project Four, originated.

University opened its doors in 1987, the program paid special attention to the inadequate compensation offered to the local artisan – handcraft and agriculture industrial development. Since that time, our industrial design program has provided society with trained design professionals capable of transforming raw materials into products, having such results as furniture designers, lamp designers, and product designers. As the only University in Guatemala to offer Industrial Design, we are making the market aware of the potential of our professionals. Being a Jesuit University, we promote social projects to aid people and communities by applying our own discipline. One such program is Project Four. It is a design course in our industrial design masters program. It is called project four because it is the fourth sequential project out of a total of 8 semester project courses. Its main purpose is to engage students in real life design problems, specifically in artisan products. By virtue of an agreement signed with the artisans of Antigua Guatemala, our students are able to work in the artisan's actual workshop. The goal of the course is that students be able to design, with the skill and guidance of the artisan, new and innovative products. The collaboration is a true partnership because, the artisans, who may work in wood, silver, jade ceramics and some metals such as bronze, offer their workshops and knowledge to the students. And, in exchange, the industrial design department offers training to the artisans in related design fields, such as 2-dimensional design and methodology.

At the start of the course, the students take part in a six-day field trip called "Gira Artesanal". On the trip, they visit different artisans' workshops throughout the country. They visit artisan

communities in the regions of Cobán, Petén and Izabal. Of course, the artisans' shops are contacted in advance to facilitate the tour. The goal of this trip is that the students not only see and understand the production process, but for them to appreciate that what the artisans do is part of their life. Artisans' products and techniques are inherited from generation to generation and is part of the Guatemalan culture. This awareness helps the student approach the project with the proper degree of respect for the culture and the artisans' way of life.

The teacher facilitates the student/artisan interaction. First, the artisans give the students a short talk that includes information about the materials, tools and processes. After that, the students are allowed to take pictures and converse with the artisans. Some of the questions posed to the artisans are about costs and manufacturing processes. All such questions are promptly answered by the artisans. Not only do the students get to see the production process up close, but they get to try their hand at using the artisans' materials and techniques. Guided by the artisans, students are invited to experiment with a range of techniques.

Immediately upon returning from their trip, the students turn their attention to research. They form research groups to investigate such topics as "National and international market tendencies in the design field". The report is presented to the whole group in an audio visual presentation. This information will help each student discern if there truly is a market need for his new product. After the students use their research to gain a better idea of who the artisans are and how they work, the young designers receive their assignments to work with specific artisans of Antigua Guatemala who have previously agreed to participate in the project. Why Antigua? There are two very practical reasons. Antigua has a diverse community of artisans and it is very close to the university campus.

The Process

While working closely with his assigned artisan in his workshop, the student observes his mentor and asks questions until a design challenge becomes apparent. He then undertakes to find solutions to the problem. Over several trips to the Antigua workshop, the student proposes and assesses possible solutions. He also brings his work-in-progress to the professor for assessment at regularly assigned times. Students are expected to visit the artisans' workshop for a minimum of fifteen visits during the project to consult with the master craftsman and to create his own work under the artisans' direction. The student visits are verified by forms that the artisans must sign and date showing that the student did indeed participate in regular workshop sessions. Nearing the end of the semester, the students must present their creations to the faculty of the university design department. The compulsory documentation includes a thesis report describing the student's research, alternatives of design, final proposal, renderings, plans with measures and scale and bibliography. With that requirement now satisfied, the students next make a grand two-day presentation celebration in Antigua, Guatemala. What they have to show is full documentation and a finished prototype of their new product. This is a product designed to respond to the needs of the artisan using the materials and processes found in his own shop. There the artisans gather with the students, faculty and parents to view the completion of the semester's work. In addition, the Guatemalan artisans association is present to see the fruits of the coalition's labors, along with members of the press and representatives of AGEXPRONT, The association of artisans of non-traditional products. The sixteen week adventure is complete.

Interviews

As an interested observer from North Carolina State University, I visited with several students and artisans who had participated in the 2005 Project Four initiative.

Artisan Juan Antonio Juarez explains that his family has been in the metal working business since 1890, when his grandfather had a booming business shoeing horses. When the horses became scarce in Antigua, his family began making decorative ironwork for homes. Now, his creations of gold and silver are on display in museums and his work has represented the country of Guatemala in international conferences of craftsmen of precious metals.

A few doors down the street, Edi Haroldo Gaitán and his father Joaquin are builders of fine wood furniture. Their family has been in the woodworking business for five generations. As a testimony to the durable quality of the work done by Edi's family, I asked the purpose of thick leather sheets soaking in a bucket at the entrance of his shop. Edi turned and pointed to a sturdy, yet gracefully designed dining room chair that had had the seat pad removed. "The leather is for that chair." He explained. "The chair was built by my grandfather thirty years ago. The owner has just brought it back to our shop to be reupholstered."

Both Edi and Juan Antonio are artisans who have enjoyed participating in the Project 4 collaboration with Rafael Landivar students. When asked about their experience with the young designers, both men started by stating that they have been involved with the program since it first started four years ago, and they are looking forward to continuing with the students next year. They were obviously pleased with the result of the students' apprenticeship. I asked the men what, if anything, they felt it necessary to explain to the students right at the beginning of their collaboration. Edi stated that a problem he needed to address right away was the matter of dimensioning. "The university students learn to measure in metric, but in our shop, we only use English measurements. Students learn pretty quickly that it's not so easy to convert 3 and 3/8 inches into metric. Additionally, the students must learn the limitations of the material. There are some things you can build out of wood, but other forms are better crafted out of other materials."

Juan Antonio responded candidly to the same question. "The students have to learn that everything they imagine can't necessarily be made. Imagination is important, but in order to build anything, they have to come down out of the smoke and face the reality of what can actually be made with the materials you have."

Universidad Rafael Landivar Professor Hector Ponce couldn't agree more. "Paper will accept anything you can draw. But when it comes time to actually make it, that's when the reality of the difficulty appears. The design is modified a little at a time. But, the modifications must be seen as improvements along the way."

Demonstrating that he has taken that counsel seriously, Luis Medrano, a student in the Project 4 program, displays the set of home accessories he has crafted under the tutelage of Juan Antonio. The black, metallic wall lamp matches the waste basket and candle holders. But, the beauty of this creation is more than just skin deep. Luis' fingers fly over the keyboard of his laptop computer until a professionally crafted Flash presentation appears on the monitor. This presentation, which was composed to show his design process from beginning to end, marks its beginning much earlier than some would expect. As Luis guides me through the animated presentation, he explains that before any student could choose a product to design, he first had to

establish a concept rooted in ancient Guatemalan culture. In Luis' case, he chose for his inspiration a Guatemalan folk tale recounting a clever man's escape from certain death. The imagery of that triumph becomes the basis for the design of the family of household products. Juan Antonio seems proud of his young student's achievement.

When I asked professor Ovidio Morales what results he sees from the work of Project Four, he answers simply, "DEVELOPMENT. Due to participatory industrial design, with the help of students aided by their professors, artisans can better their lifestyle by having a greater economic income. That additional income comes from selling better "designed products" that answer the needs of the market. For example, Mr. Marvin Perez, a member of the Artisan's Association of Antigua, was recently able to sell his wood dining room furniture for up to \$3,000.00 in US currency. Before this, his furniture sold for much less. Another example is a shop called "Casa del Jade" where newly designed jewelry was sold for \$2,000.00 in US dollars. The artisans are very satisfied with the results. Every year more artisan shops participate in the project. In this year, a total of 15 shops participated.

"Another plus is that students and artisans get to interact on a very professional level, and a very good friendship grows between them. Even though the project ends at the end of the semester, some students visit their artisan mentors on a regular basis, just to have a cup of coffee and chat, now in a relaxed friendly situation/environment. From the students' point of view, working in a real life situation gets them the tools to make future real life work decisions. Now, they know more about their Guatemalan heritage and they see that the artisans' work is part of their culture. They feel concerned and aware that it is up to them to keep the tradition alive. They are also aware that industrial design through a better product can improve the artisans' economic level by providing better, well-designed products to sell. That is true development in the eyes of the industrial designer!!!"

The Next Step

After speaking with the participants in the Project Four initiative, I believe our graduate Industrial Design students at NC State could benefit from the academic experience enjoyed by Rafael Landivar students. For that reason, Ovidio Morales and I are preparing to conduct a joint studio with our respective design studios in an upcoming Project Four outing. Because of the costs involved, our first collaboration will be "virtual," with all information being conveyed by Internet. Our first design challenge will be to address the needs of the tile making artisans depicted at the beginning of this article. Our goal is to further the improvement of the Guatemalan artisans by publishing the effectiveness of this program and seeking grant funding to make further academic collaborations possible.

*Ceramics Shop
(Taller de Cerámica en Torno)
Rabinal, Alta Verapaz
Artisan Oscar Xitumul
with industrial design students →*



*Artisans Community Nu Kem
(Comunidad de Artesanas
Nu Kem) Tactic, Alta Verapaz
Student Lucía Lobos ➔*



*Necklace
Silver and Jade
(Ixmucañé Aguilar, 2003)
Flower base and ➔*



*Earrings
Silver and Jade
(Melissa Pelaez, 2005) ➔*



Necklace
Silver and Jade
(Jessica Palacios, 2005) ➔



Candle holder
Iron
(Luis Pedro Quiñonez, 2003) ➔

