

Honduras Design Initiative - “Students for Sustainability”

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In September 2012 I joined an international development initiative called “Students for Sustainability”. The initiative was formed through the Alternative Village research center at the U of M with the collaboration of Biosystems masters student Jami Carter, Biosystems professor Kris Dick and Luis Carlos an Engineering student studying at the U of M from Honduras.

The purpose of the initiative is to provide engineering students with a hands on design experience, assist in a third world sustainable development program and to support research and development at the University of Manitoba. This years initiative was centered around Jami Carter’s masters project, which was to develop a sustainable building model for a family home and construct it within Consonlaca, a rural community outside of Gracias, Lempira, Honduras. On the team were nine other students from the faculties of Civil and Bio-systems engineering. The student team would provide additional construction labor for the house and design and build four systems to be installed alongside. These systems included a stove, a sink, a latrine, and rainwater collection-filtration system.

During the fall semester our team met on a weekly basis to plan, discuss and prototype our designs. I was placed on a team with two others that were responsible for designing the latrine. All of our design methods were focused on utilizing locally found materials and simple construction methods that could be replicated and maintained. There was no electricity or equipment on site to assist in the building process.

Jami traveled to Honduras in January 2013. Before our arrival on February 10th she began the construction process on the house. When we arrived on February 10th she had the walls of the house developed. Over the next twelve days in Honduras we balanced our time between building our own systems and assisting with the remaining construction on the home.

During our stay we billeted in the home of local Honduran families. Our evenings were spent learning Spanish, eating with our host families and interacting with the culture in Gracias, Honduras. The connection with our host families and the relationships that we formed with the locals on the building site were crucial to understanding the impact and significance of our design work.

I am very grateful for my involvement in this project because it has provided me an opportunity to witness first hand the need and impact of sustainable design within a third world context. It was crucial in our design process to understand the limitations of our building site, the reduced material availability and the economic limitations of the community. As a result of my involvement I have an increased knowledge on how to approach sustainable design in a socially, economically and environmentally responsible way both at home and abroad.

Being the only Architecture student within the group of participants, I also found this experience to be an excellent opportunity to engage in inter-disciplinary research and development. The connections made during this experience will prove to be beneficial for the rest of my education, any research that I will be involved in at the university and my outlook and approach to career aspirations within the industry.

Thank you to AWB who supported my involvement with this project.

This service learning opportunity will continue in future years in the community of Consonlaca, Honduras. As the initiative broadens and seeks to impact the holistic needs of the local population it will also include opportunities for nursing and education students.

To learn more about the ongoing developments of Students for Sustainability and the Honduras initiative The Growing Village please visit:

<http://thegrowingvillage.org/studentsforsustainability.html>

To learn more about the Alternative Village and its research projects at the University of Manitoba please visit:

http://umanitoba.ca/faculties/engineering/departments/design/alternative_village/