FROM THE OUTSIDE LOOKING IN

Barbara Silvis, Defiance College Board of Trustees, DC Class of '72

As a member of the Board of Trustees of Defiance College, it is critical that I and the other Trustees understand what the McMaster School for Advancing Humanity is doing, and why and how, particularly since it is such an important enhancement to the educational offerings of the College. When students participate as McMaster Scholars they ramp up their learning in significant ways and improve their potential to pursue viable careers post college. McMaster Scholars also retain at the institution at a rate of 96%. So what does the McMaster School really do?

For 10 days I participated in an exploratory trip to Nicaragua and Panama to identify possible new partners for McMaster School in a new site or sites. It was an incredible honor to see and meet the amazing people already working to improve living conditions in their own countries. By the end of the trip we recognized them as heroes and it was equally empowering to see what simple ask and listen sessions would lead to.

Here's what happens…

1. Before the exploratory trip, potential partners are identified through recommendations from vetted corporate entities in country and surveys of local NGOs. These leads coalesce into a connection with a local person that is willing to serve as a liaison for the exploratory. The goal is to be able to make connections on the ground with potential partners that the team can then vet through more extensive communications to gauge interest and possibilities.
2. The participants from the College also develop a knowledge base about each potential partner. They study what the partners do, how they do it, how successful they are, what are the impacts, and what populations do they serve.
3. Once the participants are on the ground, a sharing session occurs, starting with an exploration of what the potential partners think is holding them back, what are the gaps, and what are their aspirational goals to expand their work beyond what they currently do.
4. At that point, a brainstorming session begins between the participants from the College and the potential partners, asking and listening and also exploring what kinds of projects have been done in other places and what might or might not work for the potential partners.
5. Once the top three or four ideas are identified, each is explored in some detail, until some agreement is reached on what would be the most impactful and the most possible given the resources of the College participants and the partners staff and volunteers. All the ideas and partners are then considered for a new site possibility.

This process is repeated for each potential partner. For the nine days we were in Panama and Nicaragua, we visited 12 different potential partners and charted nearly 60 possible projects in both countries. Each vetted ahead of time and each with exciting potential. The top ideas for each site are then consolidated and evaluated based on funding, potential student project staffing, resources on site, etc.

Once sites and partners are selected, students on campus are invited to write project proposals to fulfill one or more of the ideas based on the site and partners selected. The proposals are reviewed by the McMaster Fellows and then by the Dean of the McMaster School and the President of the College, to finalize the selections for funding. Team size is funding dependent and negotiated between Fellows and the Dean. But this is just the beginning of the project.

The objectives are always to work with the partners to implement a sustainable improvement in the local community. This means that often a "teach the teacher" model is utilized. For example, teaching First Aid includes teaching a curriculum to local community members so that the learning opportunity can be perpetuated and not disappear when the students return home. Water testing and analysis results in potential recommendations for local villages on how to improve water quality, but in a way that can be sustainably managed by the local community between visits from the students.

This process involves students working for up to a year to prepare what is needed to accomplish the project goals once they arrive at the site. The students study the problem at hand and develop solutions that might work effectively with the community partners' expertise once on site. This work is done individually but also collaboratively in learning communities that meet weekly throughout the school year.

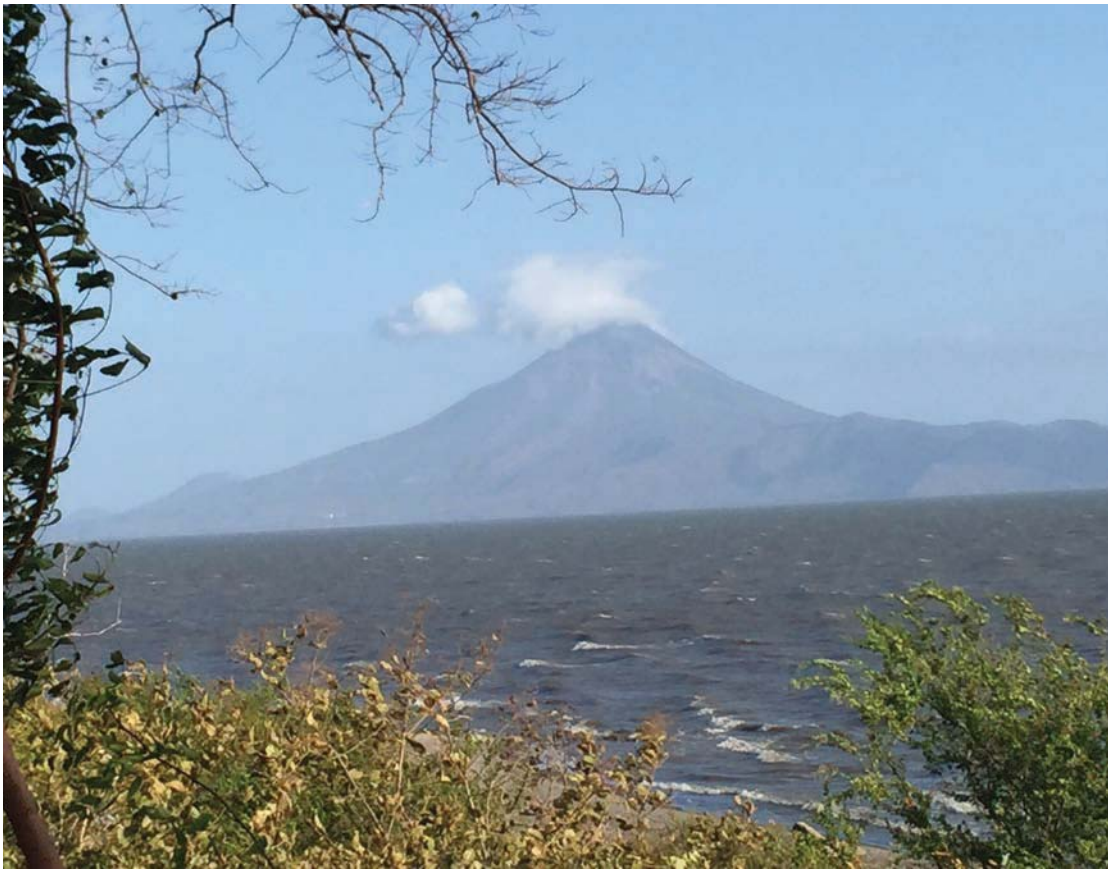
Once the student teams arrive on site, each has a plan to work with the partners to implement projects. But this is also a very collaborative effort that leverages the context and knowledge base of the local communities. To explain further it is not just that the work is community requested – there is a real partnership that develops and the solutions are reached through

both the academic knowledge and skills of McMaster Fellows and Scholars and the local expertise. This program recognizes how much local people are really the 'heroes' working toward solutions.

And then they are still not done. Each project is reported (by the students) and data is maintained on the impact of the projects. The projects are often multiyear and thus the McMaster School can evaluate improvement in the local communities' objectives over time.

An example is the San Carlos Village in Belize. This site has been a McMaster School site for more than 10 years, and 136 projects have been implemented and many of those projects continue on to this day, including development and implementation of better teaching strategies, water quality improvements, sustainable farming practices, repaired relationships with conservation area rangers, a restaurant run by women as a new enterprise, solar power infrastructure, educational initiatives for residents about endangered species and why/how to protect them.

How does this work on the ground? Here's a couple examples from my own experience on the exploratory trip to Panama and Nicaragua.



On the slopes of Volcano Masaya, we met up with a dedicated group of environmental scientists from Paso Pacifico, an NGO with the mission of raising awareness and improving the ecological viability of the pacific dry forest corridor, specifically focused along the south coast of Nicaragua.

Their 40-person staff is essentially flat out with a bewildering array of projects and activities, from restoring forest habitat, to counting bats, and educating the population about what a great asset bats are, to identifying a once thought extinct frog species to carbon sequestration finance projects.

Here's what we learned about how they might be a partner with the McMaster School.

Defiance College has a restoration ecology major. One of the pieces of scientific scholarship that is needed by Paso Pacifico is to measure and record change over time. For example, over seven years, observationally, a patch of restored forest habitat has changed markedly. But what does that really mean in terms of holding water, species habitat diversity, temperature, nutrient load in the ground, etc. This is important in order to convince people to expand this work. Journals and observations are maintained, but have not been written up or published. Defiance College students could (actually while back at the College) consolidate and write up the data for Paso Pacifico to publish.

In the meantime, I took refuge in a truck from the clouds of sulfur smoke off the active caldera only feet away. I will never forget that experience and my new found understanding of environmental work in unusual places.

Another opportunity involves a mother and father who decided to try to build a better life for their extended families. Sixteen families in all, mostly daughters, granddaughters, cousins, etc.

Here's what they did. They reclaimed two hectares of land and started farming it. The women do most of the farming while the men work at other jobs to sustain the families while they try to make this work. They have gotten a lot of great advice. They mix their own natural fertilizers, rotate the crops, raise chickens and ducks, are creating a fish pond to grow tilapia, and have set up an irrigation system from the bordering creek.

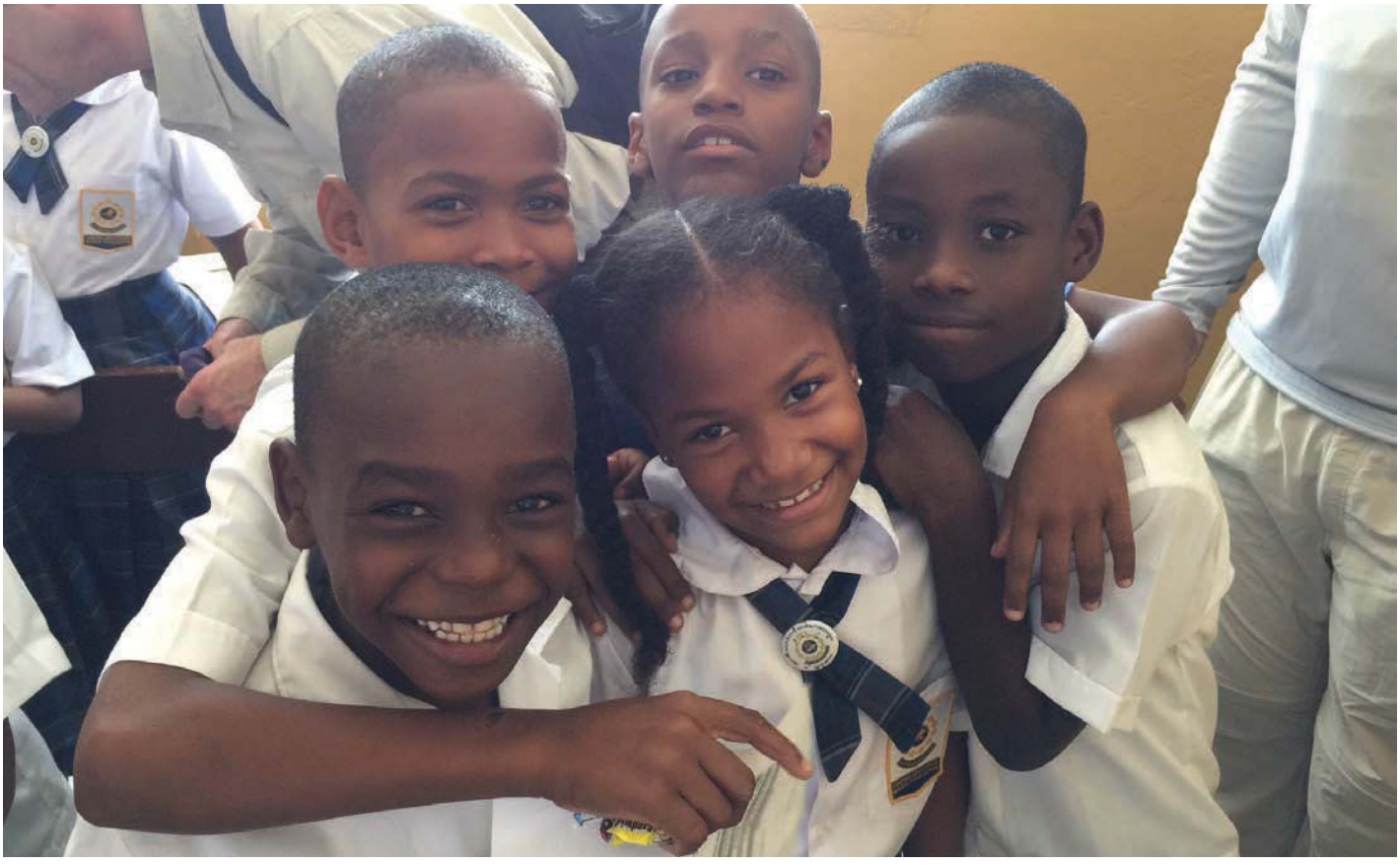
And yet, it is still incredibly difficult to make this work. We were there in the dry season, and there had been no potable water at the farm for the last 16 days. They have challenges getting produce to market before it spoils. There are pests destroying the watermelon plants, the irrigation system is not too efficient, and it's hard for the women to do all the work involved.

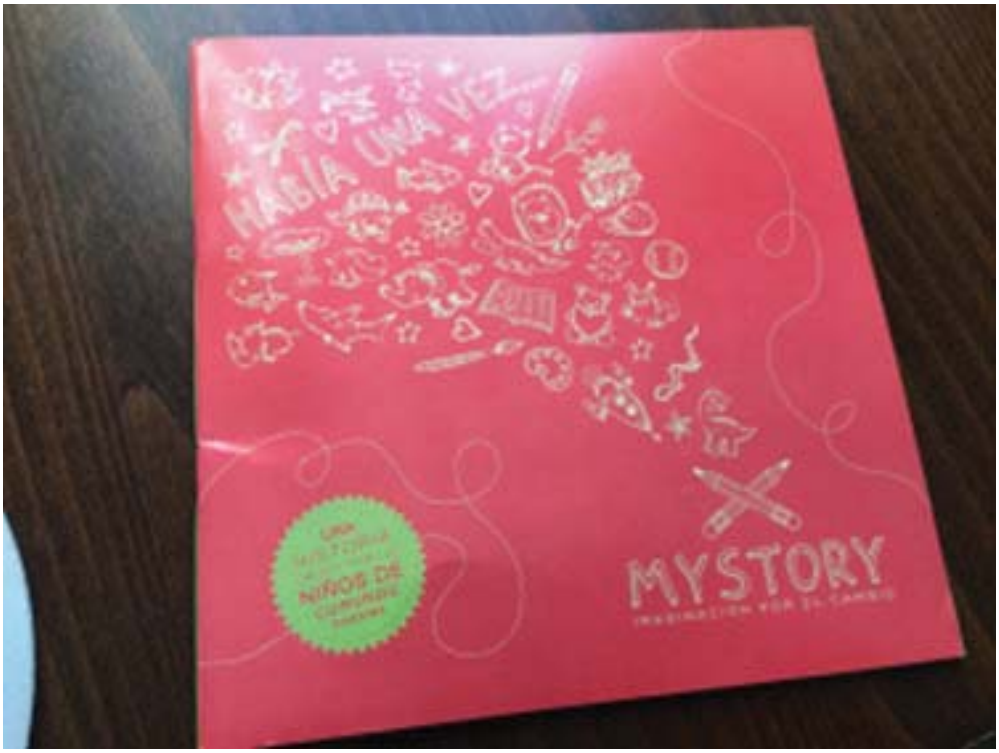
So here we were, three hours from Panama City, out on a farm with the families talking about what they need to be more successful. The sun was hot and the chickens were exploring everywhere. The wind blew dust in our eyes, and that was just the beginning. We followed the whole group to look at the creek, the chicken coops, the crops, the fallow field, the bean patch and the fish pond. Then we start to talk about possibilities.

Here are some ideas that evolved out of the conversation.

- Coming up with a drip feed irrigation system using inexpensive hose that could be easily rolled out where needed to make much better use of the irrigation system, and improve yields.
- Teaching the women to preserve food by canning, perhaps over a wood stove. This could improve opportunities to market without requiring expensive refrigeration and power (they have none).
- Connecting with Engineers Without Borders to see if they could drill the farm a well. And install an inexpensive chlorine generation system to make the water potable for the families.

All this could be possible by organizing smart collaborations between students working in the McMaster School. The impact on these families could be huge, but the larger context is that these families are part of a village of 200 families, many with similar challenges, and helping these sixteen in a way that is sustainable for the families can spread knowledge and improve lives far beyond the families.





And on to Curundu, a notoriously poor and dangerous neighborhood in Panama City, Panama, and to Centre Educativo de Maria Pourrepin, run by the Dominican sisters. The school is the best opportunity for the children of Curundu to possibly get ahead. The school had identified a need to discuss the natural world for the children and share a recycling project with their families. (By the way, there is trash EVERYWHERE in Panama, especially water bottles and other recyclables.) So they challenged a group of 11 and 12 year olds to write an interactive book, complete with their own drawings and the opportunities to craft their own plans. Here's a picture of the book and some of the kids that made it.

The school hopes to use this book and other projects to fundraise as well as to promote environmental understanding and recycling in the local community. The possibility lies in connecting this book and other potential products of the children to markets for Spanish language children's books in the US and other countries. I am part of an effort to collect books and distribute them to young children and families in my home in Rhode Island. One of the huge challenges is that there are few books available in Spanish, and this is an obvious need in the Latino Community. Many parents are not comfortable reading English books to their children, so if the objective is to get kids exposed to books, in that community, Spanish language books are key. It's a small world, and the possibility for making those connections between the small barrio community of Curundu and Rhode Island might seem remote to some, after this trip seems totally doable to me.

P.S. I showed the children a picture of the snow in my yard in Rhode Island and they were amazed! I learned the Spanish word for "cold"--FRIO!

Several of these projects have been selected and are currently being worked on by McMaster Fellows and Scholars of Defiance College. The first team of McMaster fellows and scholars were in Panama in March, 2016 to partner with the communities there and the team for 2016 – 2017 has already been chosen. The impact on the village is great, but the impact on the students is truly amazing. They have learned about conceiving the idea, writing, planning, learning and implementing a project, all in the context of what makes sense and is needed and wanted by the individuals and communities they are working with. The McMaster School is, in short, creating world citizens and making a measurable impact for good with local communities.