Stuck in Cement: Breaking from Conventional Mindsets in Student-Led Service Learning Partnerships

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Abstract – This article illustrates our understanding, as a student team, of the challenges that conventional approaches can have when structuring joint student-community partnerships. Through the use of the metaphor “stuck in cement”, we wish to draw a distinction between viewing service learning through a results-focused lens with a sense of a clearly defined path rather than construction of partnerships. This paper will explore two main questions: Are we, as students who conduct service learning projects, stuck in a single-frame mindset? If so, how do we break free? These questions are explored through the combination of lived experience and post-field reflection. We have developed our thoughts within the context of previous work regarding approaches to international service learning projects, the challenges that are often faced, and the mindsets of those involved. This reflection, presented primarily from the perspective of student participants, is offered as an example of how our group challenged the notions of success and externally designed and implemented systems, with the hope that the example may inform future efforts of this type.

Index Terms – community engagement, interdisciplinary, mindset, sustainability

INTRODUCTION

While working as a Peace Corps Volunteer in the Dominican Republic, an alumnus from our university reached out to our faculty advisor with an opportunity to form an international service learning partnership. Though arriving from different academic and cultural backgrounds, including engineering, social science, Spanish language, and previous service learning experience; we all wanted to be part of a community-driven project. As undergraduate students,
our collective goal was to engage in a project that would allow us to gain hands-on experience, while addressing a real need within the community we would be working. With the assistance of our community partners, faculty advisors, and in-country supporters, we set out to create a lasting partnership.

Following the lines of Allen et al. (2014), we believed that one of the keys to successful service learning projects was to maintain a flexible and humble mindset. We believed that maintaining such a mindset would be the best way to stay open to the shifting context and expressed needs of our community partners. We had learned about the pitfalls and thought traps that could result from taking a linear and product-oriented view. Although we believed we could not commit such errors, as we embarked on the institutional process of project preparation and implementation, we eventually came to recognize how easily we fell off what we perceived to be the "desired" path for international service learning. We found ourselves becoming "stuck in cement," which hindered us from remaining nimble and flexible with our thinking and implementation.

We quickly learned our limitations as students and came to recognize the extent of the project and our position within it. In order to create a satisfactory product, we worked closely with Peace Corps Volunteers and El Corozo community members, to design a preliminary aqueduct model, develop a work plan, and establish stakeholder expectations. Working with elevation data and water flow estimates collected by Peace Corps Volunteers, the engineering members of our group were able to begin understanding the terrain. Moreover, through online video conferences and phone conversations, our team was able to introduce ourselves before setting foot in the community. Pre-establishing personal connections enabled us to initiate an avenue of communication and develop a preliminary agenda for the project’s activities. Group members that were not fluent in Spanish took it upon themselves to practice and review cultural references. These basic building blocks were important for connecting with the community members and creating trust. Our extensive preparation allowed us to approach the water project with a solid technical understanding while also enhancing our sociocultural perspective.

In this paper, we will apply the metaphor of being "stuck in cement" to mindsets of students conducting international service learning projects and how they are often set before arriving in the field. The figurative “cement” that we describe is not inherently bad. It signifies a state of mind - one’s own perceptions, cultural assumptions, and way of thinking. However, being stuck in a mindset causes one to become trapped and immobile, thus hindering the requisite flexibility needed for collaboration and partnership. Being “stuck” can mean that we are not aware of our own cultural baggage. Service learners and community partners can both be “stuck” to some extent, due to our embedded ways of thinking and cultural norms. In order to have a truly productive partnership, all parties need to go through a process of breaking out of their constrictive mindsets. Once we realize what is weighing us down, we can address it so that it no longer holds us back. By engaging one another, we can challenge ourselves and our community partners to break free from conventional thinking and figuratively build a new concrete foundation. The success of the project depends on the strength and appropriateness of the collectively-built foundation.

We will share our experience of reconfiguring mindsets throughout the process of preparing for, implementing and reflecting upon our own collaborative international service learning project, which was focused on improving the provision of water in a rural community in the Dominican Republic. Viewing new endeavors on a case-by-case basis allows students to break from the conventional mold and move away from applying “one size fits all” solutions. Based on
our own experiences with service learning, we show how we broke away from our conventional “cemented mindsets” and adapted our thinking to incorporate different forms of knowledge and expertise.

BACKGROUND

The Geographical and Cultural Context
During this project, we collaborated with the community of El Corozo, located in the Sanchez-Ramirez province of the Dominican Republic. The community is home to approximately 300 families who have sought to improve their access to water for over 5 years. El Corozo is largely comprised of families that make their living from subsistence agriculture, while many others grow and sell cash crops like cacao. High in the mountains, the terrain of El Corozo is very rugged and hilly, which is one of the reasons for the lack of water infrastructure. Dirt roads also make transportation to and from the community very difficult. Even with the nearest town being close to 20 miles away, it takes over an hour to travel there in a car. Though the community did not lack food, problems with water availability and unreliable electricity made day-to-day tasks challenging. Nevertheless, the community was resourceful and worked as a unit to find a solution to their collective hardship. This resilience would become essential for the continuation of the water project after the departure of the students.

Community members formed a Water Committee in order to organize their initiative to begin a water project. The Committee initially reached out to governmental and non-governmental organizations, but they never received the response they desired. Undeterred by unsuccessful attempts, El Corozo continued their pursuit for a system that would provide potable, running water. Their continued efforts eventually led them to reach out to a Peace Corps Volunteer in a neighboring community. Thanks to this Volunteer’s relationship with his alma mater, he was able to introduce an opportunity for students to participate in a service-learning project with El Corozo.

The student team involved in this initiative came from a myriad of backgrounds. Each student was at least functionally bilingual, speaking and understanding both English and Spanish. Coming from different cultural backgrounds and having previous travel experiences, all students knew how to navigate exposure to new and different cultures. With regard to academics, the team was split equally between engineers and social scientists. The balance of technical problem-solving and social understanding helped create a dynamic that allowed the team to better consider the social implications of the aqueduct technology being implemented.

The Technical Context
Our service learning project involved the design and construction of a water supply system to provide water directly to 300 homes in the community of El Corozo, as well as the nearby community of Corozo Abajo. The community members identified a source of water in the nearby mountain range, roughly 3 km away from their town. Given the variable flow rates between the rainy and dry seasons, we designed for an average demand of approximately 60 liters of water per person per day. The initial portion of the aqueduct system that we took part in constructing was mainly comprised of a concrete intake structure and a 60,000 liter ferrocement reservoir, which had 10 meters of fluid potential between them, thus allowing gravity to pull water through the system. A 2.5 km pipeline connected the intake to the reservoir. This pipeline consisted mostly of 3” PVC and galvanized pipes that were buried in underground, hand-dug trenches. The
remaining portion of the aqueduct includes the distribution piping channels, which will supply each of the 300 homes with water from the reservoir. Due to our limitations with funding and time, our team was not able to complete this portion; however the Water Committee has continued constructing the remainder of the system with additional assistance from the Peace Corps and other non-governmental organizations.

As a student group, we followed a design methodology that was developed and implemented by previous Peace Corps Volunteers and implemented elsewhere in the Dominican Republic. The materials were sourced from nearby hardware stores, transported in large trucks, and often paid for by either the community or our grant funds. In addition to funding resources, the community organized work brigades, which were led by community leaders and were comprised of community members who wanted to receive water. Our student team worked side by side with these brigades on a daily basis, discussing challenges and alternatives with the brigade leaders, and giving them the authority to make final decisions regarding construction work. Through a process of iterative consultation, thoughts, concerns, and suggestions from the work brigades were expressed and considered on a daily basis.

The Intellectual Context
Service learning allows us to realize how connected we are to others around the world, and the experiential nature of service learning creates awareness of our cultural biases. In reality, the goal is not to replicate prior successes by using a secret formula, because there is no secret formula, but rather to give each experience its own value. To promote sustainability, a strategy that accounts for and respects diversity is needed. Taking a multidisciplinary approach, while acknowledging non-conventional knowledge, not only incorporates multiple perspectives and ideas, but it also increases optionality in both function and response. In order to take a multidisciplinary approach that results in sustainable development, it is necessary to emphasize engagement, diversity, and optionality. This mindset discourages temporary fixes and encourages us to break from our molds to create long-term partnerships. The primary focus here is placed on cultivating a strong working relationship with community partners, while allowing the project’s final deliverable to become a secondary priority.

As university students, we have felt the pressure to produce results that lead to attaining successful outcomes. While at first glance such pressure may come from good intentions, Gregorian (2004) describes the institutional practices that higher education advocates for. His argument highlights the tendency that such practices pressure students to follow methods that ensure a standard career path rather than engaging in true learning. Upon reflection, we came to realize that this mindset, which narrowly focuses on results, affects how we initially perceived the importance and purpose of community engagement. Our own mindsets were colored with the sentiment of always needing the right answer that would result in the delivery of a successful product, which often encouraged some type of physical deliverable. As our group entered the grant-writing phase, we were constantly reminded by our funding organization that certain steps were necessary for obtaining “success.” We perceived that our university and funding organization were quantifying achievements through the completion of these same measures. Consequently, we initially held the delivery of our physical deliverables, such as the designs and construction of the aqueduct, at a much higher priority than developing the required partnership needed to support and sustain the project. Our experience was part of a general understanding, tacit at times, that conventional wisdom regarding service learning has been passed along institutionally from student group to student group. Accordingly, it has been our experience that
when it comes to service learning, there are a number of formulaic models that share a common prescriptive thread. A strong desire for a “tried and true” method to success has been emphasized, where the focus solely lies on producing tangible results and solutions, as opposed to cultivating mutual understanding and co-development. Students, and their faculty, often unwittingly embrace the notion that theory gives rise to practice, whereas evidence shows that practice can give rise to strategic thinking and help inform, if not create new theory.

Such mindsets suggest that there is a method that lays out a clear blueprint for success, provided one does not deviate from that plan. Lucena et al’s (2008) best illustrates this idea in “Engineering and Sustainable Community Development.” Given that several members of the student team were engineering students, this approach had been ingrained in us as part of our technical training, which initially constrained our perspective of how to appropriately approach implementation of the project.

After our first day on the ground, our team began to realize the blind spots of a conventional mindset that could hinder an equitable partnership. Upon arrival in El Corozo, we learned that the community had already begun the preparation and logistics for constructing the aqueduct. Seeing their initiative showed us a level of determination that we did not realize was characteristic of El Corozo community members. As outsiders, we knew then that we would not be able to effectively lead the water project, especially given the strong sense of self-reliance within the community. We began working more closely with the Water Committee, and started to consolidate the diversity of knowledge and skills brought by each partner. There were opportunities where we could have remained rigid and stuck to our original plans, which would have left us in charge of the entire project as technical “experts” managing all of the project’s operations. However, we knew this would be unrealistic, given our limited understanding and our short stay of only two months, the project could not be sustained if we tried to take ownership for ourselves. Including stakeholders, such as the Water Committee, community members and other local partner organizations, in the decision-making process created a collaborative partnership with increased functional and intellectual diversity. This collaboration was only possible after we broke from our unilateral, results-centered approach and embraced a more open-ended, cooperative mindset.

We wanted the project to have a long-lasting impact. However, if we were to stick to the conventional methods, we would have run the risk of our mindsets being figuratively stuck in a cemented mold that was fixated on the end product. Just like cement secures one structure to another, having a one-size-fits-all mindset for service learning can restrict us from securing to new ideas or forming our own. We, as collective partners, realized that there was value in building our own forms and laying our own cement, instead of trying to reuse pre-fabricated pieces that were not compatible. The mindset that there is one solution for all scenarios can have at least two effects. First, it leaves our mind stuck to the concept of all-inclusive applications, and second, it reduces optionality in a system by reducing functional diversity and agency amongst all the participants. During our preparation, we learned that when agency is decreased in such efforts, community equity could be greatly reduced. At first, we sought to apply this lesson by unilaterally developing an approach that would enhance El Corozo’s agency, not realizing that El Corozo actually needed to be included in the planning and decision-making process in order to establish equity.

Through our engagement with El Corozo, our team’s definition of success changed from building an aqueduct to developing the social infrastructure that would sustain the sociotechnical system of the aqueduct. Rather than trying to unilaterally create a fail-safe system, we
understood our role as contributing to a joint venture that would have structures in place to promote sustainability. It is likely that our group would have never come to such a realization had it not been for our collaboration with community members of El Corozo, our Peace Corps partners, and the duration of our engagement. This realization contradicts what many institutions teach. There are several journals that advocate a "strategic planning network" in order to maximize the full potential of international non-profits; essentially the main focus here is placed on the implementation and the diversification of techniques in order to create the most change. xv, xvi Subsequently, this leaves out the very essence of what service learning is: community engagement. It was through our involvement with the local community that our perspective changed from striving to reach a successful end goal to empowering the community to address its own needs and concerns.

As communication began to flow readily on all fronts, we quickly noticed that adapting our perspective would be useful for advancing the common goals of the community and our team. Open lines of communication allowed multiple entry points for different parties to become involved in the decision-making process. This not only helped our group to be more confident in our actions, but it allowed the community to trust us enough to be honest about inadequacies or misunderstandings. Promoting dialogue between different stakeholders allows for more diversity and more optionality, which enhances resilience and “antifragile” conditions.xvii, xviii El Corozo was certainly resilient, which was necessary for co-participatory efforts to be sustained by the community well beyond the involvement of our group of outside students.xix

**BREAKING CEMENT: SHIFTING OUR PERSPECTIVE IN THREE STAGES**

*First the Shock: Challenging our Mindset*
From our disciplines to our skills, each one of our team members arrived with a different way of thinking. In fact, each member felt self-assured regarding their mindset and intentions as they related to the project upon arrival. However, following the initial weeks of interacting with and learning from the community members, brigade leaders, and Water Committee, we started noticing disconnects between the manner in which we were taught, how we thought things functioned, and how things actually worked. Upon reflection, we came to see this phase of our time on the ground as a period of great challenge to our mindsets and preconceived notions. Swap and Wayland (2014) refer to this phase of student development in service learning and community engagement as the “snow-globe” phase.xx The formalized training we received as students in engineering and social science tended to be delivered in rigidly structured curriculums, which promote systematic linear thinking.xx We had primarily been taught to identify certain problems from a limited set of conditions, and apply “proven” methods that correspond to those problems in order to solve them. For example, when designing the pipeline for the intake system of the aqueduct, we collected quantitative data for the topography of the community, water flow rates for the source, and locations for access and distribution points. We worked with our technical advisors and followed a “tried and true” design methodology from literature to design the system. These initial aqueduct designs were made in isolation from the community, with the thought that they could be applied to the existing conditions in the community once we arrived. In practice, our team unconsciously manifested the same linear mindset that was characteristic of our training in school.
By reading reflective pieces from previous international service learning projects such as Brown-Glazner et al. (2010), McDaniel et al. (2011) and de Chastonay et al. (2012) prior to departure, we were made aware of the value of incorporating local knowledge into the process of project design, especially when facing challenges that arise on the ground. However, it was not until we faced the realities on the ground for ourselves that this lesson was applied by our group. The engineers in our team quickly became aware of the effectiveness of some ingenious local approaches to the design and construction work, which made us question whether our formal, academically-approved approach was actually the most practical. What struck our team most was that the local approaches relied more on creativity and making use of things that were readily available rather than expending limited resources to implement unnecessarily sophisticated solutions. Adapting our designs to incorporate more elements of the community’s local expertise made sense logically. Collaborating with community members to address the design challenges was far more practical than us trying to “fix” everything ourselves, and since they were involved in the process, it also ensured that the users of the system could better maintain the system. For example, whenever the work brigade encountered difficult terrain, they would ask for our guidance for installing the pipeline. We used those opportunities to consult with the brigade’s leaders, who knew the terrain better than we did, and the workers to devise practical strategies for maneuvering the pipeline, removing obstacles, and securing pipes in order to ensure proper fluid flow.

The social scientists in our team strived to genuinely understand the meaning of “community” and “neighbor” not as a homogeneous group of people, but as socially, culturally, and economically diverse populations. While members of our team read Link et al. (2012), which discusses the diversity and heterogeneity of these terms from an academic perspective, the lessons did not really sink in until our team actually was present to acknowledge the diversity and complexity of these terms while on the ground in the Dominican Republic. Having had preconceived notions challenged, the team set out to reconsider, reevaluate, and redesign what had been considered quantitative and qualitative metrics of success – only this time we were alongside the project’s main stakeholders on the ground. At the end of each day during the first several weeks of the project, the team spent many hours processing the lived and experienced shocks to our mindsets.

Through the Cracks: Seeing Value of Alternate Perspectives

From the start of the project, our student team and the community shared the firm expectation of holding regular meetings, both formally and informally. The objective of such an approach was to increase face time with our partners and facilitate collaboration on the project’s logistics, as well as the vision for the long-term sustainability of the project. Formal gatherings took place with three distinct groups. Each Sunday morning, there would be a brigade captains meeting that reviewed the week’s progress, challenges, achievements, and retrospective. Each Wednesday, the student team met with the Water Committee to review the budget, supplies, concerns, objectives and milestones. Every two to three weeks there would be a community-wide meeting that allowed for the exchange of ideas, updates, and thoughts of the water system and its socio-economic implications. Informal meetings would take place whenever an important or unexpected situation emerged. In the evenings, during the weekend, and at the end of workdays, it was not uncommon for a meeting to be taking place, either at our host family’s house or at the meeting hall. The central and most meaningful goal of these meetings was to create a forum for open, frank, and productive dialogue.
By exchanging ideas, approaches and concerns about the project, two main outcomes resulted: the establishment of equity, as every person present had a say in the project and had an opportunity to become an active participant of the project; and the introduction of optionality, as participants suggested alternative methods for the project to move forward. In essence, these different perspectives served to help crack the cemented mindsets that were focused solely on products. Our conversations created cracks on how our team envisioned the water system, our role in the project, and most importantly, the community’s role – and ownership of the project. Respectful engagement, along with acknowledgement and appreciation of all the assets that our partnering community possessed, ultimately allowed our cemented mindset to begin to crack. This process allowed us to gain an awareness of the community’s functional diversity, and it taught us the different ways that the community is able to respond to challenges, given their existing level of expertise and access to local resources. Ultimately, “we” outgrew a team of five university students serving as technical coordinators and became a community of diverse individuals and families.

**Finally the Break: Embracing a Co-Participatory Approach**

Entering into the community with a fixed mindset was simultaneously comforting and restrictive. It was comforting in that it provided us with what we believed to be certainty regarding the path we thought we should follow. From our perspective as students, our task seemed straightforward, which provided the team with great comfort. It was restrictive in that even as different circumstances and situations presented themselves, we were inclined to stick to our initial plans, because doing what we originally planned would have been much easier than redesigning the project with our community partners. The same mindset that provided comfort with these preconceived notions initially prevented us from exploring alternative approaches to solutions and understanding unforeseen challenges.

It was only after having spent more time on the ground, and having to cope with these issues, that we realized our mindsets were focusing on unfettered movement towards our project goals. We realized that we needed to break free from this restrictive mindset, so we looked to the community for insight. Making use of resources within the community not only supported local trades, but incorporating intimate knowledge of community members also increased optionality with regard to methods for addressing issues like terrain challenges. By the end of the project, our team was able to break away from an academically-ingrained engineered approach to problem-solving, impersonal professional interactions, and efficiency-focused work ethic. Yet to break away did not mean to discredit – it simply meant to be open to understand and adopt new forms of knowledge, practice and capital, while exchanging that which we already knew.

From pre-implementation design to technical construction stages, communication became a key component of our day to day work – there was a greater focus on productive iteration than meeting pre-set goals, and an embrace of problems and challenges as opportunities to co-design solutions. Daily work would often be divided amongst two to three groups of mini-brigades that consisted of students, brigade workers, and a brigade leader. We no longer felt restricted. Instead, we became aware of the abundance of resources, both human and natural, that surrounded us. Together, we all created something greater than the sum of our individual parts.

While our cemented mindsets were being broken apart, we also noticed a shift in the mindset of the community members. Despite the communication before our arrival, there was a sense of uncertainty as many of the community members still had lingering questions. In fact, upon our arrival, the community regarded us as experts who had the answers for solving their water
challenges. The days and weeks that followed involved the Water Committee asking our advice and permission before making any decisions regarding the project. Once we realized we couldn’t plan and construct the aqueduct on our own, we began asking the Water Committee for advice and permission before making any design-related decisions. Not only did this reinforce the community’s ownership on the project, but it also solidified the collaboration that we sought.

Given our extensive engagement and open communication, we both came to develop more realistic expectations and mutual understanding of our collective roles and abilities. The community started out by viewing their challenges as deficiencies and relied heavily on external momentum, such as the initiation of the water project, to address their issues. When comparing their local expertise and knowledge to the technical specifications of aqueduct engineering, the community members did not see their skills as holding the same value. With just a slight nudge provided by our collaboration, which could be viewed as a shock to community’s collective mindset, the community and its leaders quickly went from seeing themselves as being dependent on its partners to seeing themselves as confident decision-makers from whom we, the project team learned. Our commitment to learn about and incorporate the skills and understanding of the community members into the water system encouraged them to see the value in their knowledge. The cemented mindsets of the Water Committee were certainly broken as a result of the co-participatory nature of our partnership and the co-generation of knowledge that was typical of our work. This realization was also empowering for the entire community and motivated them to continue building on the collective progress that was already achieved.

**FORMING NEW CEMENT: RECONSTRUCTING MINDSETS**

*Gathering Resources*

After breaking up old concrete, it is necessary to begin forming a new foundation with the scattered pieces of cement. The first step is to take inventory of the existing supplies and determine what is still needed. When analyzing the pieces of broken cement, we are looking closely at the skills and abilities of all partners and stakeholders. We identify what options are present and play to the strengths of each stakeholder so as to maximize the likelihood of a positive result, and then we carefully integrate them into our approach. This is like creating a customized concrete mixture, with precise component ratios of water, cement, and aggregate.

*Preparation and Groundwork - Setting the Forms*

Once we have all the resources that we need, and we understand how to utilize each of them, we can begin the groundwork. It is necessary to prepare a proper foundation before thinking about placing concrete anywhere. Doing so provides long-term stability to the concrete structure by making sure the foundation beneath the concrete is strong and uniform. Similar to preparing a foundation for a concrete slab, a strong foundation must be established within a community before undertaking any projects. A community and its partners need to be organized and willing to work together to uphold their commitments.

In addition to the digging and stabilizing the foundation, additional preparatory work must be done to ensure sustainability of concrete. This work includes building the forms, which will give the concrete its shape, and preparing the rebar, which gives the concrete its strength. The forms and the rebar are never visible in the end product, but they are absolutely necessary for establishing the inner and outer framework of a concrete structure. The forms can be likened to
the cultural norms and policies, which shape the initiatives of a community and its partners. The rebar is more like the commitment and expectations that give strength and resilience to an initiative.

Mixing and Pouring Concrete

After preparation of the foundation, rebar and forms, the concrete is ready to be mixed and poured into the forms. When making the mixture, it is important to have the correct amount of cement, aggregate, and water. When recycling broken-up cement, we need to account for the pre-existing ingredients contained in it, so as not to add any unnecessary ingredients.

Determining the ratio needed for concrete and mixing it up is like establishing partnerships amongst stakeholders. Recognizing what each partner has to contribute and organizing interdisciplinary efforts to optimize collective contributions has a huge impact on the value that is generated by an initiative. Identifying and including additives to the mixture can help to improve the concrete in ways that traditional ingredients cannot. Admixtures like fly ash and plasticizers can represent the addition of diverse, unconventional partners to foster a multidisciplinary approach to community engagement. The process of physically mixing and pouring the concrete is symbolic of the sharing of ideas and perspectives, the joining of forces, and the formation of heterogeneous collaborations.

Setting and Loading Concrete

Once the concrete mixture is poured and settled into the forms, it must go through a time-dependent setting phase. As the concrete sets over the course of a few days and weeks, it becomes stronger. Once the concrete reaches a certain level of strength, it is finally capable of holding a load. The time required for concrete to hydrate and strengthen can be likened to the time needed for the community to build confidence and take ownership over its initiative. This is an important step for ensuring sustainability because it creates autonomy within the community leadership, thereby reducing its dependence on its partners. The process of concrete setting is also similar to the process of transferring knowledge, in which the community and its partners collaborate to build the community’s capacity and put protocols in place to promote long-term resilience. In order for concrete to reach its full potential and maintain its structural integrity, the time required for the concrete’s curing process cannot be compressed. Similarly, the transfer of knowledge takes time and should be done diligently to avoid premature failure of an initiative. This last step in the service learning community engagement process is discussed by Swap and Wayland along with its importance and the potential pitfalls caused by haphazard handoff practice. In order to avoid potential problems, a well-conceived transfer of project ownership is needed to ensure that the community ultimately owns and can manage the knowledge, regardless of how much assistance it needs from its partners. Once the community begins to manage its own affairs with minimal intervention from its partners, the load is truly placed on their concrete structure.

Because expectations were established and responsibilities were affirmed early in our partnership, the Water Committee was able to act as the executive owner of the project. This approach allowed for the transfer of knowledge to take place gradually throughout the planning and decision-making processes, rather than occurring all at once like in a conventional handoff. Consequently after our departure, the Water Committee continued working on the aqueduct and eventually completed the project without our physical presence. This was made possible due to
the Water Committee’s undying determination, ongoing logistical support via Peace Corps Volunteers, and additional funding offered by partner organizations.

PAVING THE WAY TO COMMUNITY-CENTERED APPROACH

Our group’s perception of the conventional approach’s shortcomings was ultimately realized through consistent communication between our partners. Due to the initiative displayed by El Corozo, the importance of community engagement becomes inseparable from achieving sustainability. We soon realized that a results-based approach would fail to represent the social dimensions that enable a project to be truly successful. Breaking from the mold allowed us to focus on the human bonds and enabled us to be more flexible to design for adaptations.

This awareness was possible only after each project partner underwent a process of breaking free from their “cemented mindset.” Passing stages of shocking, cracking and breaking these mindsets, we came to recognize the value of alternative methods that incorporate community knowledge, which was conventionally disregarded because of its informal nature. Community members in El Corozo also grew to realize their own sense of agency and valued their skills once they were able to put them into action. By acknowledging diverse forms of knowledge, leveraging skillsets of partners, and cultivating autonomy within the community, the resulting joint venture produced mutual, long-lasting benefits for both the community and service learners. Consequently, our group not only managed to complete our task of initiating the aqueduct’s construction, but we were able to build a strong foundation that enabled the continuation of the project. Even after our departure, the community, through the collectively-developed infrastructure, was able to continue advancing the aqueduct’s pipeline.

The act of broadening our perspective beyond the highly prescriptive approaches also allowed us to create a relationship that valued equity. A central tenet in the field of resilience practice is that within natural systems, an increase in functional diversity relates to an increase in the ability of the system to respond to disturbance. Therefore, the addition of diversity knowledge, both formal and informal, serves to add durability to the relationship. By following a more co-participatory approach, an approach more closely related to transdisciplinarity, we were able to broaden and redefine our partnership with the Water Committee. As a result, this allowed us to incorporate our own abilities along with the abilities of the community, in order to leverage these strengths as part of a sustainable joint venture.

We emphasize the importance of building a strong relationship with all community partners before giving in to the temptations to establish any unilateral initiatives. Doing so elicits community input regarding collaborative projects and gives them the authority to make their own decisions. Having community leaders act as executive authorities reduces their dependency on service learners, allowing communities to sustain initiatives without their direct oversight. When service learners are answerable to their on-site partners, on-site partners have the ability to listen to the recommendations of service learners, and decide for themselves what course of action to take. This may empower communities to continue initiatives or begin new projects as they see fit.

Despite having started as a group of individuals, through our engagement with El Corozo, we had a genuine experience of the “unity” in community. As the project broadened, we increasingly saw ourselves as facilitators of change, rather than being the means of change ourselves. Instead of trying simply to deliver a product, our goal was to work alongside the
community to address a specific concern. Though we ran the common risk of being too ambitious, the community’s voice and its leadership directed us to pursue very realistic goals. While we started to realize that our limited technical skills as students would not be enough, the community simultaneously began to see their own talents as important assets for the project. Of course this realization involved entrusting the ownership of the aqueduct to the system’s users by highlighting their decisive voice. Implementing the aqueduct through this approach required us to dramatically change how we and the community previously thought of international service learning, by exchanging knowledge and ideas that led to the creation of new foundational mindsets. By the end of the project, our collective ability to break from conventional thinking created a more resilient aqueduct project in El Corozo, where the community members have been and will continue to be the ultimate agents affecting change, whereas we remain gracious visitors who were welcomed and invited to collaborate.

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